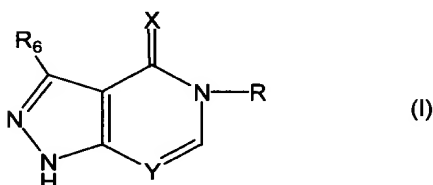


Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A compound represented by the formula I:



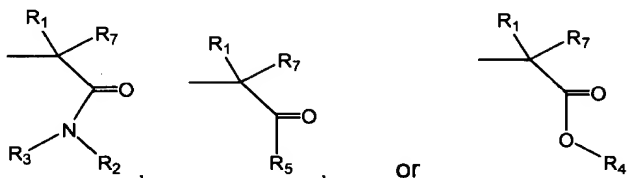
wherein:

X is O or S;

Y is N or CH;

R₆ is H or OH; and

R is



wherein:

R₁ is hydrogen or an alkyl, alkenyl, alkynyl, alkoxy, allyloxy, aryl, heteroaryl, cycloalkyl or heterocycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group

consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{CO}-\text{R}_c$, $-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{O}-\text{R}_c$, $-\text{O}-\text{CO}-\text{R}_c$, $-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{OH}$, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{COR}_f$, $-\text{COOR}_f$, $-\text{O}-\text{CO}-\text{O}-\text{R}_f$, $-\text{O}-\text{CO}-\text{R}_f$, $-\text{OH}$, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, $-\text{OH}$, $=\text{O}$, $-\text{N}-\text{OH}$, $\text{N}-\text{OR}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{OR}_c$, $-\text{CO}-\text{R}_c$, $-\text{NR}_c-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{C}-\text{CO}-\text{OR}_c$, $-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{O}-\text{CO}-\text{O}-\text{R}_c$, $\text{O}-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{SH}$, $-\text{O}-\text{R}_b$, $-\text{O}-\text{R}_a-\text{O}-$, $-\text{S}-\text{R}_b$, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a , R_b , R_c , R_d , and R_e are defined above;

R_2 and R_3 are each independently hydrogen or an alkyl, alkenyl, alkoxy, aryl, heteroaryl, cycloalkyl, or heterocycloalkyl group, or R_2 and R_3 together with the N atom to which they are attached form a 4- to 10-membered heterocycloalkyl or heteroaryl group containing at least one N, S or O heteroatom, where the alkyl, alkenyl, alkoxy, aryl, heteroaryl, cycloalkyl, or heterocycloalkyl group is unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, $-\text{NO}_2$, $-\text{N}-\text{OH}$, $\text{N}-\text{OR}_c$, $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, $-\text{OH}$, $-\text{O}-\text{R}_a-\text{O}-$, $-\text{OR}_b$, $-\text{CO}-\text{R}_c$, $\text{O}-\text{CO}-\text{R}_c$, $-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{O}-\text{CO}-\text{R}_c$, $-\text{O}-\text{OR}_c$, $=\text{O}$, $=\text{S}$, SO_2-R_c , $-\text{SO}-\text{R}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{O}-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO}-\text{R}_e$, $\text{NR}_c-\text{CO}-\text{OR}_e$, $-\text{CO}-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{O}-\text{SO}_2-\text{R}_c$, $-\text{O}-\text{SO}-\text{R}_c$, $-\text{O}-\text{S}-\text{R}_c$, $-\text{S}-\text{CO}-\text{R}_c$, $-\text{SO}-\text{CO}-\text{OR}_c$, $-\text{SO}_2-\text{CO}-\text{OR}_c$, $-\text{O}-\text{SO}_3$, $-\text{NR}_c-\text{SR}_d$, $-\text{NR}_c-\text{SO}-\text{R}_d$, $\text{NR}_c-\text{SO}_2-\text{R}_d$, $-\text{CO}-\text{SR}_c$, $-\text{CO}-\text{SO}-\text{R}_c$, $\text{CO}-\text{SO}_2-\text{R}_c$, $-\text{CS}-\text{R}_c$, $-\text{CSO}-\text{R}_c$, $-\text{CSO}_2-\text{R}_c$, $-\text{NR}_c-\text{CS}-\text{R}_d$, $-\text{O}-\text{CS}-\text{R}_c$, $-\text{O}-\text{CSO}-\text{R}_c$, $\text{O}-\text{CSO}_2-\text{R}_c$, $-\text{SO}_2-\text{NR}_d\text{R}_e$, $-\text{SO}-\text{NR}_d\text{R}_e$,

-S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above;

R₄ is hydrogen or an alkyl, alkenyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from

the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{CO}-R_c$, $-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{O}-R_c$, $-\text{O}-\text{CO}-R_c$, $-\text{NR}_c-\text{CO}-R_d$, $-\text{CO}-\text{NR}_dR_e$, $-\text{OH}$, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{COR}_f$, $-\text{COOR}_f$, $-\text{O}-\text{CO}-\text{O}-R_f$, $-\text{O}-\text{CO}-R_f$, $-\text{OH}$, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, $-\text{OH}$, $=\text{O}$, $-\text{N}-\text{OH}$, $\text{N}-\text{OR}_c$, $-\text{NR}_dR_e$, $-\text{CO}-\text{NR}_dR_e$, $-\text{CO}-\text{OR}_c$, $-\text{CO}-R_c$, $-\text{NR}_c-\text{CO}-\text{NR}_dR_e$, $-\text{C}-\text{CO}-\text{OR}_c$, $-\text{NR}_c-\text{CO}-R_d$, $-\text{O}-\text{CO}-\text{O}-R_c$, $\text{O}-\text{CO}-\text{NR}_dR_e$, $-\text{SH}$, $-\text{O}-R_b$, $-\text{O}-R_a-\text{O}-$, $-\text{S}-R_b$, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a , R_b , R_c , R_d , and R_e are defined above;

R_5 is hydrogen or an alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, $-\text{NO}_2$, $-\text{N}-\text{OH}$, $\text{N}-\text{OR}_c$, $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, $-\text{OH}$, $-\text{O}-R_a-\text{O}-$, $-\text{OR}_b$, $-\text{CO}-R_c$, $\text{O}-\text{CO}-R_c$, $-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{O}-\text{CO}-R_c$, $-\text{O}-\text{OR}_c$, $=\text{O}$, $=\text{S}$, SO_2-R_c , $-\text{SO}-R_c$, $-\text{NR}_dR_e$, $-\text{CO}-\text{NR}_dR_e$, $-\text{O}-\text{CO}-\text{NR}_dR_e$, $-\text{NR}_c-\text{CO}-\text{NR}_dR_e$, $-\text{NR}_c-\text{CO}-R_e$, $\text{NR}_c-\text{CO}-\text{OR}_e$, $-\text{CO}-\text{NR}_c-\text{CO}-R_d$, $-\text{O}-\text{SO}_2-R_c$, $-\text{O}-\text{SO}-R_c$, $-\text{O}-\text{S}-R_c$, $-\text{S}-\text{CO}-R_c$, $-\text{SO}-\text{CO}-\text{OR}_c$, $-\text{SO}_2-\text{CO}-\text{OR}_c$, $-\text{O}-\text{SO}_3$, $-\text{NR}_c-\text{SR}_d$, $-\text{NR}_c-\text{SO}-R_d$, $\text{NR}_c-\text{SO}_2-R_d$, $-\text{CO}-\text{SR}_c$, $-\text{CO}-\text{SO}-R_c$, $\text{CO}-\text{SO}_2-R_c$, $-\text{CS}-R_c$, $-\text{CSO}-R_c$, $-\text{CSO}_2-R_c$, $-\text{NR}_c-\text{CS}-R_d$, $-\text{O}-\text{CS}-R_c$, $-\text{O}-\text{CSO}-R_c$, $\text{O}-\text{CSO}_2-R_c$, $-\text{SO}_2-\text{NR}_dR_e$, $-\text{SO}-\text{NR}_dR_e$, $-\text{S}-\text{NR}_dR_e$, $-\text{NR}_d-\text{CSO}_2-R_d$, $-\text{NR}_c-\text{CSO}-R_d$, $\text{NR}_c-\text{CS}-R_d$, $-\text{SH}$, $-\text{S}-R_b$, and $-\text{PO}_2-\text{OR}_c$, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl,

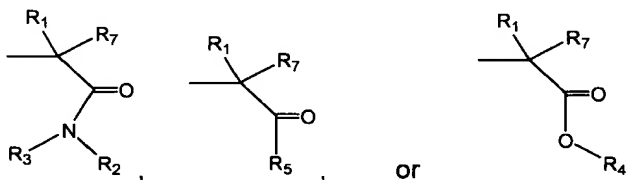
and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{CO}-R_c$, $-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{O}-R_c$, $-\text{O}-\text{CO}-R_c$, $-\text{NR}_c-\text{CO}-R_d$, $-\text{CO}-\text{NR}_dR_e$, $-\text{OH}$, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{COR}_f$, $-\text{COOR}_f$, $-\text{O}-\text{CO}-\text{O}-R_f$, $-\text{O}-\text{CO}-R_f$, $-\text{OH}$, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, $-\text{OH}$, $=\text{O}$, $-\text{N}-\text{OH}$, $\text{N}-\text{OR}_c$, $-\text{NR}_dR_e$, $-\text{CO}-\text{NR}_dR_e$, $-\text{CO}-\text{OR}_c$, $-\text{CO}-R_c$, $-\text{NR}_c-\text{CO}-\text{NR}_dR_e$, $-\text{C}-\text{CO}-\text{OR}_c$, $-\text{NR}_c-\text{CO}-R_d$, $-\text{O}-\text{CO}-\text{O}-R_c$, $\text{O}-\text{CO}-\text{NR}_dR_e$, $-\text{SH}$, $-\text{O}-R_b$, $-\text{O}-R_a-\text{O}-$, $-\text{S}-R_b$, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a , R_b , R_c , R_d , and R_e are defined above; and

R_7 is hydrogen or a C_1 - C_3 alkyl, hydroxy or C_1 - C_3 alkoxy group;

or a pharmaceutically acceptable salt thereof, ~~a pharmaceutically acceptable prodrug, or a pharmaceutically active metabolite of said compound, or a pharmaceutically acceptable salt of said metabolite.~~

2. (original) A compound or pharmaceutically acceptable salt according to claim 1, wherein:

R is



wherein:

R_1 is an aryl or heteroaryl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, $-\text{NO}_2$, $-\text{N}-\text{OH}$, $\text{N}-\text{OR}_c$, $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$

where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above;

R₂ and R₃ are each independently hydrogen or an alkyl, alkenyl, alkoxy, aryl, heteroaryl, cycloalkyl, or heterocycloalkyl group, or R₂ and R₃ together with the N atom to which they are attached form a 4- to 10-membered heterocycloalkyl or heteroaryl group containing at least one N, S or O heteroatom, where the alkyl, alkenyl, alkoxy, aryl, heteroaryl, cycloalkyl, or heterocycloalkyl group is unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c,

-SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above;

R₄ is hydrogen or an alkyl, alkenyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -

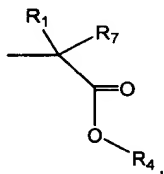
$\text{NR}_d\text{-CSO}_2\text{-R}_d$, $\text{-NR}_c\text{-CSO-R}_d$, $\text{NR}_c\text{-CS-R}_d$, -SH , -S-R_b , and $\text{-PO}_2\text{-OR}_c$, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c , -CO-OR_c , -O-CO-O-R_c , -O-CO-R_c , $\text{-NR}_c\text{-CO-R}_d$, $\text{-CO-NR}_d\text{R}_e$, -OH , Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f , -COOR_f , -O-CO-O-R_f , -O-CO-R_f , -OH , Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , -CN , $\text{-(CH}_2\text{)}_z\text{-CN}$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH , =O , -N-OH , N-OR_c , $\text{-NR}_d\text{R}_e$, $\text{-CO-NR}_d\text{R}_e$, -CO-OR_c , -CO-R_c , $\text{-NR}_c\text{-CO-NR}_d\text{R}_e$, -C-CO-OR_c , $\text{-NR}_c\text{-CO-R}_d$, -O-CO-O-R_c , $\text{O-CO-NR}_d\text{R}_e$, -SH , -O-R_b , $\text{-O-R}_a\text{-O-}$, -S-R_b , and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a , R_b , R_c , R_d , and R_e are defined above;

R_5 is hydrogen or an alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO_2 , -N-OH , N-OR_c , -CN , $\text{-(CH}_2\text{)}_z\text{-CN}$ where z is an integer from 0 to 4, halogen, -OH , $\text{-O-R}_a\text{-O-}$, -OR_b , -CO-R_c , O-CO-R_c , -CO-OR_c , -O-CO-OR_c , -O-CO-O-CO-R_c , -O-OR_c , =O , =S , $\text{SO}_2\text{-R}_c$, -SO-R_c , $\text{-NR}_d\text{R}_e$, $\text{-CO-NR}_d\text{R}_e$, $\text{-O-CO-NR}_d\text{R}_e$, $\text{-NR}_c\text{-CO-NR}_d\text{R}_e$, $\text{-NR}_c\text{-CO-R}_e$, $\text{NR}_c\text{-CO-OR}_e$, $\text{-CO-NR}_c\text{-CO-R}_d$, $\text{-O-SO}_2\text{-R}_c$, -O-SO-R_c , -O-S-R_c , -S-CO-R_c , -SO-CO-OR_c , $\text{-SO}_2\text{-CO-OR}_c$, -O-SO_3 , $\text{-NR}_c\text{-SR}_d$, $\text{-NR}_c\text{-SO-R}_d$, $\text{NR}_c\text{-SO}_2\text{-R}_d$, -CO-SR_c , -CO-SO-R_c , $\text{CO-SO}_2\text{-R}_c$, -CS-R_c , -CSO-R_c , $\text{-CSO}_2\text{-R}_c$, $\text{-NR}_c\text{-CS-R}_d$, -O-CS-R_c , -O-CSO-R_c , $\text{O-CSO}_2\text{-R}_c$, $\text{-SO}_2\text{-NR}_d\text{R}_e$, $\text{-SO-NR}_d\text{R}_e$, $\text{-S-NR}_d\text{R}_e$, $\text{-NR}_d\text{-CSO}_2\text{-R}_d$, $\text{-NR}_c\text{-CSO-R}_d$, $\text{NR}_c\text{-CS-R}_d$, -SH , -S-R_b , and $\text{-PO}_2\text{-OR}_c$, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c , -CO-OR_c , -O-CO-O-R_c , -O-CO-R_c , $\text{-NR}_c\text{-CO-R}_d$, $\text{-CO-NR}_d\text{R}_e$, -OH , Ar, heteroaryl,

heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-COR_f$, $-COOR_f$, $-O-CO-O-R_f$, $-O-CO-R_f$, $-OH$, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , $-CN$, $-(CH_2)_z-CN$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, $-OH$, $=O$, $-N-OH$, $N-OR_c$, $-NR_dR_e$, $-CO-NR_dR_e$, $-CO-OR_c$, $-CO-R_c$, $-NR_c-CO-NR_dR_e$, $-C-CO-OR_c$, $-NR_c-CO-R_d$, $-O-CO-O-R_c$, $O-CO-NR_dR_e$, $-SH$, $-O-R_b$, $-O-R_a-O-$, $-S-R_b$, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a , R_b , R_c , R_d , and R_e are defined above; and

R_7 is hydrogen or a C_1 - C_3 alkyl, hydroxy or C_1 - C_3 alkoxy group;

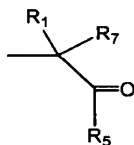
3. (original) A compound or pharmaceutically acceptable salt according to claim 2, wherein R is



and wherein R_4 is hydrogen or an alkyl or cycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, $-NO_2$, $-N-OH$, $N-OR_c$, $-CN$, $-(CH_2)_z-CN$ where z is an integer from 0 to 4, halogen, $-OH$, $-O-R_a-O-$, $-OR_b$, $-CO-R_c$, $O-CO-R_c$, $-CO-OR_c$, $-O-CO-OR_c$, $-O-CO-O-CO-R_c$, $-O-OR_c$, $=O$, $=S$, SO_2-R_c , $-SO-R_c$, $-NR_dR_e$, $-CO-NR_dR_e$, $-O-CO-NR_dR_e$, $-NR_c-CO-NR_dR_e$, $-NR_c-CO-R_e$, $NR_c-CO-OR_e$, $-CO-NR_c-CO-R_d$, $-O-SO_2-R_c$, $-O-SO-R_c$, $-O-S-R_c$, $-S-CO-R_c$, $-SO-CO-OR_c$, $-SO_2-CO-OR_c$, $-O-SO_3$, $-NR_c-SR_d$, $-NR_c-SO-R_d$, $NR_c-SO_2-R_d$, $-CO-SR_c$, $-CO-SO-R_c$, $CO-SO_2-R_c$, $-CS-R_c$, $-CSO-R_c$, $-CSO_2-R_c$, $-NR_c-CS-R_d$, $-O-CS-R_c$, $-O-CSO-R_c$, $O-CSO_2-R_c$, $-SO_2-NR_dR_e$, $-SO-NR_dR_e$, $-S-NR_dR_e$, $-NR_d-CSO_2-R_d$, $-NR_c-CSO-R_d$, NR_c-CS-R_d , $-SH$, $-S-R_b$, and $-PO_2-OR_c$, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-CO-R_c$, $-CO-OR_c$, $-O-CO-O-R_c$, $-O-CO-R_c$, $-NR_c-CO-R_d$, $-CO-NR_dR_e$, $-OH$, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl,

haloalkyl, alkenyl, alkynyl, $-\text{COR}_f$, $-\text{COOR}_f$, $-\text{O-CO-O-R}_f$, $-\text{O-CO-R}_f$, $-\text{OH}$, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, $-\text{OH}$, $=\text{O}$, $-\text{N-OH}$, N-OR_c , $-\text{NR}_d\text{R}_e$, $-\text{CO-NR}_d\text{R}_e$, $-\text{CO-OR}_c$, $-\text{CO-R}_c$, $-\text{NR}_c-\text{CO-NR}_d\text{R}_e$, $-\text{C-CO-OR}_c$, $-\text{NR}_c-\text{CO-R}_d$, $-\text{O-CO-O-R}_c$, $\text{O-CO-NR}_d\text{R}_e$, $-\text{SH}$, $-\text{O-R}_b$, $-\text{O-R}_a-\text{O-}$, $-\text{S-R}_b$, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a , R_b , R_c , R_d , and R_e are defined above.

4. (original) A compound or pharmaceutically acceptable salt according to claim 2, wherein R is

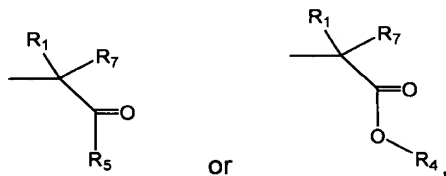


and wherein wherein R_5 is an alkyl or heterocycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, $-\text{NO}_2$, $-\text{N-OH}$, N-OR_c , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, $-\text{OH}$, $-\text{O-R}_a-\text{O-}$, $-\text{OR}_b$, $-\text{CO-R}_c$, O-CO-R_c , $-\text{CO-OR}_c$, $-\text{O-CO-OR}_c$, $-\text{O-CO-O-CO-R}_c$, $-\text{O-OR}_c$, $=\text{O}$, $=\text{S}$, SO_2-R_c , $-\text{SO-R}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO-NR}_d\text{R}_e$, $-\text{O-CO-NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO-NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO-R}_e$, $\text{NR}_c-\text{CO-OR}_e$, $-\text{CO-NR}_c-\text{CO-R}_d$, $-\text{O-SO}_2-\text{R}_c$, $-\text{O-SO-R}_c$, $-\text{O-S-R}_c$, $-\text{S-CO-R}_c$, $-\text{SO-CO-OR}_c$, $-\text{SO}_2-\text{CO-OR}_c$, $-\text{O-SO}_3$, $-\text{NR}_c-\text{SR}_d$, $-\text{NR}_c-\text{SO-R}_d$, $\text{NR}_c-\text{SO}_2-\text{R}_d$, $-\text{CO-SR}_c$, $-\text{CO-SO-R}_c$, $\text{CO-SO}_2-\text{R}_c$, $-\text{CS-R}_c$, $-\text{CSO-R}_c$, $-\text{CSO}_2-\text{R}_c$, $-\text{NR}_c-\text{CS-R}_d$, $-\text{O-CS-R}_c$, $-\text{O-CSO-R}_c$, $\text{O-CSO}_2-\text{R}_c$, $-\text{SO}_2-\text{NR}_d\text{R}_e$, $-\text{SO-NR}_d\text{R}_e$, $-\text{S-NR}_d\text{R}_e$, $-\text{NR}_d-\text{CSO}_2-\text{R}_d$, $-\text{NR}_c-\text{CSO-R}_d$, $\text{NR}_c-\text{CS-R}_d$, $-\text{SH}$, $-\text{S-R}_b$, and $-\text{PO}_2-\text{OR}_c$, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{CO-R}_c$, $-\text{CO-OR}_c$, $-\text{O-CO-O-R}_c$, $-\text{O-CO-R}_c$, $-\text{NR}_c-\text{CO-R}_d$, $-\text{CO-NR}_d\text{R}_e$, $-\text{OH}$, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{COR}_f$, $-\text{COOR}_f$, $-\text{O-CO-O-R}_f$, $-\text{O-CO-R}_f$, $-\text{OH}$, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of

NO_2 , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, $-\text{OH}$, $=\text{O}$, $-\text{N}-\text{OH}$, $-\text{N}-\text{OR}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{OR}_c$, $-\text{CO}-\text{R}_c$, $-\text{NR}_c-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{C}-\text{CO}-\text{OR}_c$, $-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{O}-\text{CO}-\text{O}-\text{R}_c$, $\text{O}-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{SH}$, $-\text{O}-\text{R}_b$, $-\text{O}-\text{R}_a-\text{O}-$, $-\text{S}-\text{R}_b$, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a , R_b , R_c , R_d , and R_e are defined above.

5. (original) A compound or pharmaceutically acceptable salt according to claim 2, wherein R_7 is hydrogen.

6. (original) A compound or pharmaceutically acceptable salt according to claim 2, wherein R is



and wherein

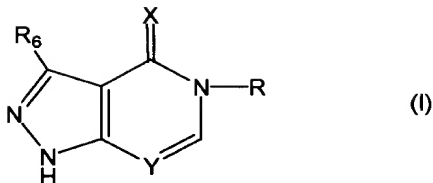
R_4 is hydrogen or an alkyl or cycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, $-\text{NO}_2$, $-\text{N}-\text{OH}$, $-\text{N}-\text{OR}_c$, $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, $-\text{OH}$, $-\text{O}-\text{R}_a-\text{O}-$, $-\text{OR}_b$, $-\text{CO}-\text{R}_c$, $\text{O}-\text{CO}-\text{R}_c$, $-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{O}-\text{CO}-\text{R}_c$, $-\text{O}-\text{OR}_c$, $=\text{O}$, $=\text{S}$, SO_2-R_c , $-\text{SO}-\text{R}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{O}-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO}-\text{R}_e$, $\text{NR}_c-\text{CO}-\text{OR}_e$, $-\text{CO}-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{O}-\text{SO}_2-\text{R}_c$, $-\text{O}-\text{SO}-\text{R}_c$, $-\text{O}-\text{S}-\text{R}_c$, $-\text{S}-\text{CO}-\text{R}_c$, $-\text{SO}-\text{CO}-\text{OR}_c$, $-\text{SO}_2-\text{CO}-\text{OR}_c$, $-\text{O}-\text{SO}_3$, $-\text{NR}_c-\text{SR}_d$, $-\text{NR}_c-\text{SO}-\text{R}_d$, $\text{NR}_c-\text{SO}_2-\text{R}_d$, $-\text{CO}-\text{SR}_c$, $-\text{CO}-\text{SO}-\text{R}_c$, $\text{CO}-\text{SO}_2-\text{R}_c$, $-\text{CS}-\text{R}_c$, $-\text{CSO}-\text{R}_c$, $-\text{CSO}_2-\text{R}_c$, $-\text{NR}_c-\text{CS}-\text{R}_d$, $-\text{O}-\text{CS}-\text{R}_c$, $-\text{O}-\text{CSO}-\text{R}_c$, $\text{O}-\text{CSO}_2-\text{R}_c$, $-\text{SO}_2-\text{NR}_d\text{R}_e$, $-\text{SO}-\text{NR}_d\text{R}_e$, $-\text{S}-\text{NR}_d\text{R}_e$, $-\text{NR}_d-\text{CSO}_2-\text{R}_d$, $-\text{NR}_c-\text{CSO}-\text{R}_d$, $\text{NR}_c-\text{CS}-\text{R}_d$, $-\text{SH}$, $-\text{S}-\text{R}_b$, and $-\text{PO}_2-\text{OR}_c$, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{CO}-\text{R}_c$, $-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{O}-\text{R}_c$, $-\text{O}-\text{CO}-\text{R}_c$, $-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{OH}$, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{COR}_f$, $-\text{COOR}_f$, $-\text{O}-\text{CO}-\text{O}-\text{R}_f$, $-\text{O}-\text{CO}-\text{R}_f$, $-\text{OH}$, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is

an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above;

R₅ is an alkyl or heterocycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above; and

R₇ is hydrogen.

7. (currently amended) A compound represented by the formula I:



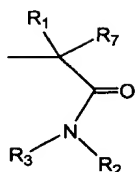
wherein:

X is O or S;

Y is N or CH;

R₆ is H or OH; and

R is



wherein:

R₁ is hydrogen or an alkyl, alkenyl, alkynyl, alkoxy, allyloxy, aryl, heteroaryl, cycloalkyl or heterocycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and

heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, $-\text{OH}$, $=\text{O}$, $-\text{N}-\text{OH}$, $\text{N}-\text{OR}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{OR}_c$, $-\text{CO}-\text{R}_c$, $-\text{NR}_c-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{C}-\text{CO}-\text{OR}_c$, $-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{O}-\text{CO}-\text{O}-\text{R}_c$, $\text{O}-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{SH}$, $-\text{O}-\text{R}_b$, $-\text{O}-\text{R}_a-\text{O}-$, $-\text{S}-\text{R}_b$, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a , R_b , R_c , R_d , and R_e are defined above;

R_7 is hydrogen, or a C_1 - C_3 alkyl, hydroxy or C_1 - C_3 alkoxy group; and

R_2 and R_3 are each independently hydrogen or an alkyl, alkenyl, alkoxy, aryl, heteroaryl, cycloalkyl, or heterocycloalkyl group, or R_2 and R_3 together with the N atom to which they are attached form a 4- to 10-membered heterocycloalkyl or heteroaryl group containing at least one N, S or O heteroatom, where the alkyl, alkenyl, alkoxy, aryl, heteroaryl, cycloalkyl, or heterocycloalkyl group is unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, $-\text{NO}_2$, $-\text{N}-\text{OH}$, $\text{N}-\text{OR}_c$, $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, $-\text{OH}$, $-\text{O}-\text{R}_a-\text{O}-$, $-\text{OR}_b$, $-\text{CO}-\text{R}_c$, $\text{O}-\text{CO}-\text{R}_c$, $-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{O}-\text{CO}-\text{R}_c$, $-\text{O}-\text{OR}_c$, $=\text{O}$, $=\text{S}$, SO_2-R_c , $-\text{SO}-\text{R}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{O}-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO}-\text{R}_e$, $\text{NR}_c-\text{CO}-\text{OR}_e$, $-\text{CO}-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{O}-\text{SO}_2-\text{R}_c$, $-\text{O}-\text{SO}-\text{R}_c$, $-\text{O}-\text{S}-\text{R}_c$, $-\text{S}-\text{CO}-\text{R}_c$, $-\text{SO}-\text{CO}-\text{OR}_c$, $-\text{SO}_2-\text{CO}-\text{OR}_c$, $-\text{O}-\text{SO}_3$, $-\text{NR}_c-\text{SR}_d$, $-\text{NR}_c-\text{SO}-\text{R}_d$, $\text{NR}_c-\text{SO}_2-\text{R}_d$, $-\text{CO}-\text{SR}_c$, $-\text{CO}-\text{SO}-\text{R}_c$, $\text{CO}-\text{SO}_2-\text{R}_c$, $-\text{CS}-\text{R}_c$, $-\text{CSO}-\text{R}_c$, $-\text{CSO}_2-\text{R}_c$, $-\text{NR}_c-\text{CS}-\text{R}_d$, $-\text{O}-\text{CS}-\text{R}_c$, $-\text{O}-\text{CSO}-\text{R}_c$, $\text{O}-\text{CSO}_2-\text{R}_c$, $-\text{SO}_2-\text{NR}_d\text{R}_e$, $-\text{SO}-\text{NR}_d\text{R}_e$, $-\text{S}-\text{NR}_d\text{R}_e$, $-\text{NR}_d-\text{CSO}_2-\text{R}_d$, $-\text{NR}_c-\text{CSO}-\text{R}_d$, $\text{NR}_c-\text{CS}-\text{R}_d$, $-\text{SH}$, $-\text{S}-\text{R}_b$, and $-\text{PO}_2-\text{OR}_c$, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{CO}-\text{R}_c$, $-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{O}-\text{R}_c$, $-\text{O}-\text{CO}-\text{R}_c$, $-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{OH}$, Ar, heteroaryl,

heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{COR}_f$, $-\text{COOR}_f$, $-\text{O-CO-O-R}_f$, $-\text{O-CO-R}_f$, $-\text{OH}$, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, $-\text{OH}$, $=\text{O}$, $-\text{N-OH}$, $-\text{OR}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO-NR}_d\text{R}_e$, $-\text{CO-OR}_c$, $-\text{CO-R}_c$, $-\text{NR}_c-\text{CO-NR}_d\text{R}_e$, $-\text{C-CO-OR}_c$, $-\text{NR}_c-\text{CO-R}_d$, $-\text{O-CO-O-R}_c$, $\text{O-CO-NR}_d\text{R}_e$, $-\text{SH}$, $-\text{O-R}_b$, $-\text{O-R}_a-\text{O-}$, $-\text{S-R}_b$, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a , R_b , R_c , R_d , and R_e are defined above;

or a pharmaceutically acceptable salt thereof, ~~a pharmaceutically acceptable prodrug, or a pharmaceutically active metabolite of said compound, or a pharmaceutically acceptable salt of said metabolite.~~

8. (original) A compound or pharmaceutically acceptable salt according to claim 7, wherein R_1 is an aryl or heteroaryl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, $-\text{NO}_2$, $-\text{N-OH}$, $-\text{N-OR}_c$, $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, $-\text{OH}$, $-\text{O-R}_a-\text{O-}$, $-\text{OR}_b$, $-\text{CO-R}_c$, O-CO-R_c , $-\text{CO-OR}_c$, $-\text{O-CO-OR}_c$, $-\text{O-CO-O-CO-R}_c$, $-\text{O-OR}_c$, $=\text{O}$, $=\text{S}$, SO_2-R_c , $-\text{SO-R}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO-NR}_d\text{R}_e$, $-\text{O-CO-NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO-NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO-R}_e$, $\text{NR}_c-\text{CO-OR}_e$, $-\text{CO-NR}_c-\text{CO-R}_d$, $-\text{O-SO}_2-\text{R}_c$, $-\text{O-SO-R}_c$, $-\text{O-S-R}_c$, $-\text{S-CO-R}_c$, $-\text{SO-CO-OR}_c$, $-\text{SO}_2-\text{CO-OR}_c$, $-\text{O-SO}_3$, $-\text{NR}_c-\text{SR}_d$, $-\text{NR}_c-\text{SO-R}_d$, $\text{NR}_c-\text{SO}_2-\text{R}_d$, $-\text{CO-SR}_c$, $-\text{CO-SO-R}_c$, $\text{CO-SO}_2-\text{R}_c$, $-\text{CS-R}_c$, $-\text{CSO-R}_c$, $-\text{CSO}_2-\text{R}_c$, $-\text{NR}_c-\text{CS-R}_d$, $-\text{O-CS-R}_c$, $-\text{O-CSO-R}_c$, $\text{O-CSO}_2-\text{R}_c$, $-\text{SO}_2-\text{NR}_d\text{R}_e$, $-\text{SO-NR}_d\text{R}_e$, $-\text{S-NR}_d\text{R}_e$, $-\text{NR}_d-\text{CSO}_2-\text{R}_d$, $-\text{NR}_c-\text{CSO-R}_d$, $\text{NR}_c-\text{CS-R}_d$, $-\text{SH}$, $-\text{S-R}_b$, and $-\text{PO}_2-\text{OR}_c$, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{CO-R}_c$, $-\text{CO-OR}_c$, $-\text{O-CO-O-R}_c$, $-\text{O-CO-R}_c$, $-\text{NR}_c-\text{CO-R}_d$, $-\text{CO-NR}_d\text{R}_e$, $-\text{OH}$, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{COR}_f$, $-\text{COOR}_f$, $-\text{O-CO-O-R}_f$, $-\text{O-CO-R}_f$, $-\text{OH}$, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group,

and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, $-\text{OH}$, $=\text{O}$, $-\text{N}-\text{OH}$, $\text{N}-\text{OR}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{OR}_c$, $-\text{CO}-\text{R}_c$, $-\text{NR}_c-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{C}-\text{CO}-\text{OR}_c$, $-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{O}-\text{CO}-\text{O}-\text{R}_c$, $\text{O}-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{SH}$, $-\text{O}-\text{R}_b$, $-\text{O}-\text{R}_a-\text{O}-$, $-\text{S}-\text{R}_b$, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a , R_b , R_c , R_d , and R_e are defined above.

9. (original) A compound or pharmaceutically acceptable salt according to claim 7, wherein R_7 is hydrogen.

10. (original) A compound or pharmaceutically acceptable salt according to claim 7, wherein R_2 and R_3 are each independently an alkyl, alkoxy or aryl group, or R_2 and R_3 together with the N atom to which they are attached form a 4- to 10-membered heterocycloalkyl or heteroaryl group containing at least one N, S or O heteroatom, where the alkyl, alkoxy, aryl or heterocycloalkyl group is unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, $-\text{NO}_2$, $-\text{N}-\text{OH}$, $\text{N}-\text{OR}_c$, $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, $-\text{OH}$, $-\text{O}-\text{R}_a-\text{O}-$, $-\text{OR}_b$, $-\text{CO}-\text{R}_c$, $\text{O}-\text{CO}-\text{R}_c$, $-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{O}-\text{CO}-\text{R}_c$, $-\text{O}-\text{OR}_c$, $=\text{O}$, $=\text{S}$, SO_2-R_c , $-\text{SO}-\text{R}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{O}-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO}-\text{R}_e$, $\text{NR}_c-\text{CO}-\text{OR}_e$, $-\text{CO}-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{O}-\text{SO}_2-\text{R}_c$, $-\text{O}-\text{SO}-\text{R}_c$, $-\text{O}-\text{S}-\text{R}_c$, $-\text{S}-\text{CO}-\text{R}_c$, $-\text{SO}-\text{CO}-\text{OR}_c$, $-\text{SO}_2-\text{CO}-\text{OR}_c$, $-\text{O}-\text{SO}_3$, $-\text{NR}_c-\text{SR}_d$, $-\text{NR}_c-\text{SO}-\text{R}_d$, $\text{NR}_c-\text{SO}_2-\text{R}_d$, $-\text{CO}-\text{SR}_c$, $-\text{CO}-\text{SO}-\text{R}_c$, $\text{CO}-\text{SO}_2-\text{R}_c$, $-\text{CS}-\text{R}_c$, $-\text{CSO}-\text{R}_c$, $-\text{CSO}_2-\text{R}_c$, $-\text{NR}_c-\text{CS}-\text{R}_d$, $-\text{O}-\text{CS}-\text{R}_c$, $-\text{O}-\text{CSO}-\text{R}_c$, $\text{O}-\text{CSO}_2-\text{R}_c$, $-\text{SO}_2-\text{NR}_d\text{R}_e$, $-\text{SO}-\text{NR}_d\text{R}_e$, $-\text{S}-\text{NR}_d\text{R}_e$, $-\text{NR}_d-\text{CSO}_2-\text{R}_d$, $-\text{NR}_c-\text{CSO}-\text{R}_d$, $\text{NR}_c-\text{CS}-\text{R}_d$, $-\text{SH}$, $-\text{S}-\text{R}_b$, and $-\text{PO}_2-\text{OR}_c$, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{CO}-\text{R}_c$, $-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{O}-\text{R}_c$, $-\text{O}-\text{CO}-\text{R}_c$, $-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{OH}$, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{COR}_f$, $-\text{COOR}_f$, $-\text{O}-\text{CO}-\text{O}-\text{R}_f$, $-\text{O}-\text{CO}-\text{R}_f$, $-\text{OH}$, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, $-\text{OH}$, $=\text{O}$, $-\text{N}-\text{OH}$, $\text{N}-\text{OR}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{OR}_c$, $-\text{CO}-$

R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above.

11. (original) A compound or pharmaceutically acceptable salt according to claim 7, wherein

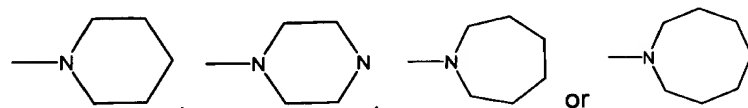
R₁ is an aryl or heteroaryl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_r, -COOR_r, -O-CO-O-R_r, -O-CO-R_r, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_r is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above;

R₇ is hydrogen; and

R₂ and R₃ are each independently an alkyl, alkoxy or aryl group, or R₂ and R₃ together with the N atom to which they are attached form a 4- to 10-membered

heterocycloalkyl or heteroaryl group containing at least one N, S or O heteroatom, where the alkyl, alkoxy, aryl or heterocycloalkyl group is unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, $-\text{NO}_2$, $-\text{N}-\text{OH}$, $\text{N}-\text{OR}_c$, $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, $-\text{OH}$, $-\text{O}-\text{R}_a-\text{O}-$, $-\text{OR}_b$, $-\text{CO}-\text{R}_c$, $\text{O}-\text{CO}-\text{R}_c$, $-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{O}-\text{CO}-\text{R}_c$, $-\text{O}-\text{OR}_c$, $=\text{O}$, $=\text{S}$, SO_2-R_c , $-\text{SO}-\text{R}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{O}-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO}-\text{R}_e$, $\text{NR}_c-\text{CO}-\text{OR}_e$, $-\text{CO}-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{O}-\text{SO}_2-\text{R}_c$, $-\text{O}-\text{SO}-\text{R}_c$, $-\text{O}-\text{S}-\text{R}_c$, $-\text{S}-\text{CO}-\text{R}_c$, $-\text{SO}-\text{CO}-\text{OR}_c$, $-\text{SO}_2-\text{CO}-\text{OR}_c$, $-\text{O}-\text{SO}_3$, $-\text{NR}_c-\text{SR}_d$, $-\text{NR}_c-\text{SO}-\text{R}_d$, $\text{NR}_c-\text{SO}_2-\text{R}_d$, $-\text{CO}-\text{SR}_c$, $-\text{CO}-\text{SO}-\text{R}_c$, $\text{CO}-\text{SO}_2-\text{R}_c$, $-\text{CS}-\text{R}_c$, $-\text{CSO}-\text{R}_c$, $-\text{CSO}_2-\text{R}_c$, $-\text{NR}_c-\text{CS}-\text{R}_d$, $-\text{O}-\text{CS}-\text{R}_c$, $-\text{O}-\text{CSO}-\text{R}_c$, $\text{O}-\text{CSO}_2-\text{R}_c$, $-\text{SO}_2-\text{NR}_d\text{R}_e$, $-\text{SO}-\text{NR}_d\text{R}_e$, $-\text{S}-\text{NR}_d\text{R}_e$, $-\text{NR}_d-\text{CSO}_2-\text{R}_d$, $-\text{NR}_c-\text{CSO}-\text{R}_d$, $\text{NR}_c-\text{CS}-\text{R}_d$, $-\text{SH}$, $-\text{S}-\text{R}_b$, and $-\text{PO}_2-\text{OR}_c$, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{CO}-\text{R}_c$, $-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{O}-\text{R}_c$, $-\text{O}-\text{CO}-\text{R}_c$, $-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{OH}$, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{COR}_f$, $-\text{COOR}_f$, $-\text{O}-\text{CO}-\text{O}-\text{R}_f$, $-\text{O}-\text{CO}-\text{R}_f$, $-\text{OH}$, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, $-\text{OH}$, $=\text{O}$, $-\text{N}-\text{OH}$, $\text{N}-\text{OR}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{OR}_c$, $-\text{CO}-\text{R}_c$, $-\text{NR}_c-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{C}-\text{CO}-\text{OR}_c$, $-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{O}-\text{CO}-\text{O}-\text{R}_c$, $\text{O}-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{SH}$, $-\text{O}-\text{R}_b$, $-\text{O}-\text{R}_a-\text{O}-$, $-\text{S}-\text{R}_b$, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a , R_b , R_c , R_d , and R_e are defined above.

12. (original) A compound or pharmaceutically acceptable salt according to claim 10, wherein R_2 and R_3 together with the N atom to which they are attached form

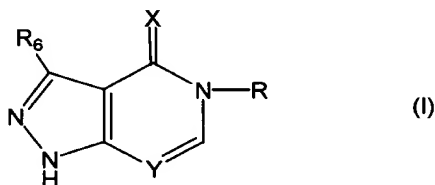


unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, $-\text{NO}_2$, $-\text{N}-\text{OH}$, $\text{N}-\text{OR}_c$, $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is

an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above.

13. (original) A compound or pharmaceutically acceptable salt according to claim 12, wherein the N-heterocycloalkyl group is substituted with one or more substituents independently selected from the group consisting of hydroxy, alkyl, -CO-alkyl, aryl, heteroaryl, cycloalkyl or heterocycloalkyl, and wherein the alkyl, aryl or heteroaryl group is unsubstituted or substituted with one or more substituents independently selected from the group consisting of halogen, hydroxy, alkoxy or allyloxy.

14. (currently amended) A compound represented by the formula I:



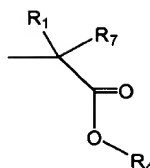
wherein:

X is O or S;

Y is N or CH;

R₆ is H or OH;

R is



wherein:

R₁ is hydrogen or an alkyl, alkenyl, alkynyl, alkoxy, allyloxy, aryl, heteroaryl, cycloalkyl or heterocycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4,

halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above;

R₇ is hydrogen or a C₁-C₃ alkyl, hydroxy or C₁-C₃ alkoxy group; and

R₄ is hydrogen or an alkyl, alkenyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group

consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above;

or a pharmaceutically acceptable salt ~~thereof, a pharmaceutically acceptable prodrug, or a pharmaceutically active metabolite of said compound, or a pharmaceutically acceptable salt of said metabolite.~~

15. (original) A compound or pharmaceutically acceptable salt according to claim 14, wherein R₁ is an aryl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above;

16. (original) A compound or pharmaceutically acceptable salt according to claim 14, wherein R_7 is hydrogen.

17. (original) A compound or pharmaceutically acceptable salt according to claim 14, wherein R_4 is hydrogen or a cycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, $-\text{NO}_2$, $-\text{N-OH}$, N-OR_c , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, $-\text{OH}$, $-\text{O-R}_a-\text{O}-$, $-\text{OR}_b$, $-\text{CO-R}_c$, O-CO-R_c , $-\text{CO-OR}_c$, $-\text{O-CO-OR}_c$, $-\text{O-CO-O-CO-R}_c$, $-\text{O-OR}_c$, $=\text{O}$, $=\text{S}$, SO_2-R_c , $-\text{SO-R}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO-NR}_d\text{R}_e$, $-\text{O-CO-NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO-NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO-R}_e$, $\text{NR}_c-\text{CO-OR}_e$, $-\text{CO-NR}_c-\text{CO-R}_d$, $-\text{O-SO}_2-\text{R}_c$, $-\text{O-SO-R}_c$, $-\text{O-S-R}_c$, $-\text{S-CO-R}_c$, $-\text{SO-CO-OR}_c$, $-\text{SO}_2-\text{CO-OR}_c$, $-\text{O-SO}_3$, $-\text{NR}_c-\text{SR}_d$, $-\text{NR}_c-\text{SO-R}_d$, $\text{NR}_c-\text{SO}_2-\text{R}_d$, $-\text{CO-SR}_c$, $-\text{CO-SO-R}_c$, $\text{CO-SO}_2-\text{R}_c$, $-\text{CS-R}_c$, $-\text{CSO-R}_c$, $-\text{CSO}_2-\text{R}_c$, $-\text{NR}_c-\text{CS-R}_d$, $-\text{O-CS-R}_c$, $-\text{O-CSO-R}_c$, $\text{O-CSO}_2-\text{R}_c$, $-\text{SO}_2-\text{NR}_d\text{R}_e$, $-\text{SO-NR}_d\text{R}_e$, $-\text{S-NR}_d\text{R}_e$, $-\text{NR}_d-\text{CSO}_2-\text{R}_d$, $-\text{NR}_c-\text{CSO-R}_d$, $\text{NR}_c-\text{CS-R}_d$, $-\text{SH}$, $-\text{S-R}_b$, and $-\text{PO}_2-\text{OR}_c$, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{CO-R}_c$, $-\text{CO-OR}_c$, $-\text{O-CO-O-R}_c$, $-\text{O-CO-R}_c$, $-\text{NR}_c-\text{CO-R}_d$, $-\text{CO-NR}_d\text{R}_e$, $-\text{OH}$, Ar , heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{COR}_f$, $-\text{COOR}_f$, $-\text{O-CO-O-R}_f$, $-\text{O-CO-R}_f$, $-\text{OH}$, Ar , heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, $-\text{OH}$, $=\text{O}$, $-\text{N-OH}$, N-OR_c , $-\text{NR}_d\text{R}_e$, $-\text{CO-NR}_d\text{R}_e$, $-\text{CO-OR}_c$, $-\text{CO-R}_c$, $-\text{NR}_c-\text{CO-NR}_d\text{R}_e$, $-\text{C-CO-OR}_c$, $-\text{NR}_c-\text{CO-R}_d$, $-\text{O-CO-O-R}_c$, $\text{O-CO-NR}_d\text{R}_e$, $-\text{SH}$, $-\text{O-R}_b$, $-\text{O-R}_a-\text{O}-$, $-\text{S-R}_b$, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a , R_b , R_c , R_d , and R_e are defined above.

18. (original) A compound or pharmaceutically acceptable salt according to claim 14, wherein

R_1 is an aryl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, $-\text{NO}_2$, $-\text{N-OH}$, N-OR_c , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, $-\text{OH}$, $-\text{O-R}_a-\text{O}-$, $-\text{OR}_b$, $-\text{CO-R}_c$, O-CO-R_c , $-\text{CO-OR}_c$, $-\text{O-CO-OR}_c$, $-\text{O-CO-O-CO-R}_c$, $-\text{O-OR}_c$, $=\text{O}$, $=\text{S}$, SO_2-R_c , $-\text{SO-R}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO-NR}_d\text{R}_e$, $-\text{O-CO-NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO-NR}_d\text{R}_e$, $-\text{NR}_c-\text{CO-R}_e$,

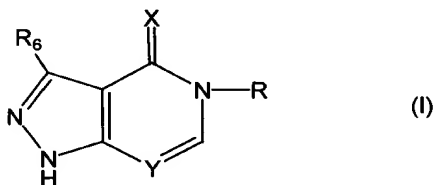
NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above;

R₇ is hydrogen; and

R₄ is hydrogen or a cycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and

R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{COR}_f$, $-\text{COOR}_f$, $-\text{O-CO-O-R}_f$, $-\text{O-CO-R}_f$, $-\text{OH}$, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, $-\text{OH}$, $=\text{O}$, $-\text{N-OH}$, N-OR_c , $-\text{NR}_d\text{R}_e$, $-\text{CO-NR}_d\text{R}_e$, $-\text{CO-OR}_c$, $-\text{CO-R}_c$, $-\text{NR}_c-\text{CO-NR}_d\text{R}_e$, $-\text{C-CO-OR}_c$, $-\text{NR}_c-\text{CO-R}_d$, $-\text{O-CO-O-R}_c$, $\text{O-CO-NR}_d\text{R}_e$, $-\text{SH}$, $-\text{O-R}_b$, $-\text{O-R}_a-\text{O}-$, $-\text{S-R}_b$, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a , R_b , R_c , R_d , and R_e are defined above.

19. (currently amended) A compound represented by the formula I:



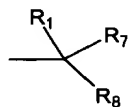
wherein:

X is O or S;

Y is CH;

R_6 is H or OH;

R is



wherein:

R_1 is hydrogen or an alkyl, alkenyl, alkynyl, alkoxy, allyloxy, aryl, heteroaryl, cycloalkyl or heterocycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, $-\text{NO}_2$, $-\text{N-OH}$, N-OR_c , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, $-\text{OH}$, $-\text{O-R}_a-\text{O}-$, $-\text{OR}_b$, $-\text{CO-R}_c$, O-CO-R_c , $-\text{CO-OR}_c$, $-\text{O-CO-OR}_c$, $-\text{O-CO-O-CO-R}_c$, $-\text{O-OR}_c$,

=O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above;

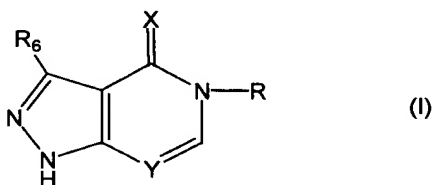
R₇ is hydrogen or a C₁-C₃ alkyl, hydroxy or C₁-C₃ alkoxy group; and

R₈ is hydrogen or an alkyl, alkenyl, alkoxy, allyloxy, aryl, heteroaryl, cycloalkyl or heterocycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -

CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where alkyl, heteroalkyl, alkenyl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above;

or a pharmaceutically acceptable salt ~~thereof, a pharmaceutically acceptable prodrug, or a pharmaceutically active metabolite of said compound, or a pharmaceutically acceptable salt of said metabolite.~~

20. (currently amended) A compound represented by the formula I:



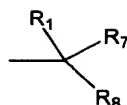
wherein:

X is O or S;

Y is N;

R₆ is OH;

R is



wherein:

R₁ is hydrogen or an alkyl, alkenyl, alkynyl, alkoxy, allyloxy, aryl, heteroaryl, cycloalkyl or heterocycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted

with one or more substituents independently selected from the group consisting of NO_2 , -CN , $\text{-(CH}_2\text{)}_z\text{-CN}$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH , =O , -N-OH , N-OR_c , $\text{-NR}_d\text{R}_e$, $\text{-CO-NR}_d\text{R}_e$, -CO-OR_c , -CO-R_c , $\text{-NR}_c\text{-CO-NR}_d\text{R}_e$, -C-CO-OR_c , $\text{-NR}_c\text{-CO-R}_d$, -O-CO-O-R_c , $\text{O-CO-NR}_d\text{R}_e$, -SH , -O-R_b , $\text{-O-R}_a\text{-O-}$, -S-R_b , and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a , R_b , R_c , R_d , and R_e are defined above;

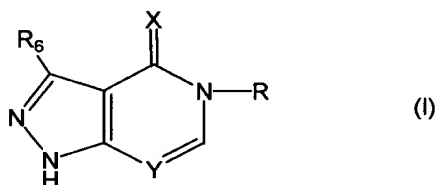
R_7 is hydrogen or a $\text{C}_1\text{-C}_3$ alkyl, hydroxy or $\text{C}_1\text{-C}_3$ alkoxy group; and

R_8 is hydrogen or an alkyl, alkenyl, alkoxy, allyloxy, aryl, heteroaryl, cycloalkyl or heterocycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO_2 , -N-OH , N-OR_c , -CN , $\text{-(CH}_2\text{)}_z\text{-CN}$ where z is an integer from 0 to 4, halogen, -OH , $\text{-O-R}_a\text{-O-}$, -OR_b , -CO-R_c , O-CO-R_c , -CO-OR_c , -O-CO-OR_c , -O-CO-O-CO-R_c , -O-OR_c , =O , =S , $\text{SO}_2\text{-R}_c$, -SO-R_c , $\text{-NR}_d\text{R}_e$, $\text{-CO-NR}_d\text{R}_e$, $\text{-O-CO-NR}_d\text{R}_e$, $\text{-NR}_c\text{-CO-NR}_d\text{R}_e$, $\text{-NR}_c\text{-CO-R}_e$, $\text{NR}_c\text{-CO-OR}_e$, $\text{-CO-NR}_c\text{-CO-R}_d$, $\text{-O-SO}_2\text{-R}_c$, -O-SO-R_c , -O-S-R_c , -S-CO-R_c , -SO-CO-OR_c , $\text{-SO}_2\text{-CO-OR}_c$, -O-SO_3 , $\text{-NR}_c\text{-SR}_d$, $\text{-NR}_c\text{-SO-R}_d$, $\text{NR}_c\text{-SO}_2\text{-R}_d$, -CO-SR_c , -CO-SO-R_c , $\text{CO-SO}_2\text{-R}_c$, -CS-R_c , -CSO-R_c , $\text{-CSO}_2\text{-R}_c$, $\text{-NR}_c\text{-CS-R}_d$, -O-CS-R_c , -O-CSO-R_c , $\text{O-CSO}_2\text{-R}_c$, $\text{-SO}_2\text{-NR}_d\text{R}_e$, $\text{-SO-NR}_d\text{R}_e$, $\text{-S-NR}_d\text{R}_e$, $\text{-NR}_d\text{-CSO}_2\text{-R}_d$, $\text{-NR}_c\text{-CSO-R}_d$, $\text{NR}_c\text{-CS-R}_d$, -SH , -S-R_b , and $\text{-PO}_2\text{-OR}_c$, where alkyl, heteroalkyl, alkenyl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c , -CO-OR_c , -O-CO-O-R_c , -O-CO-R_c , $\text{-NR}_c\text{-CO-R}_d$, $\text{-CO-NR}_d\text{R}_e$, -OH , Ar , heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f , -COOR_f , -O-CO-O-R_f , -O-CO-R_f , -OH , Ar , heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted

with one or more substituents independently selected from the group consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above;

or a pharmaceutically acceptable salt thereof, ~~a pharmaceutically acceptable prodrug, or a pharmaceutically active metabolite of said compound, or a pharmaceutically acceptable salt of said metabolite.~~

21. (currently amended) A compound represented by the formula I:



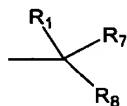
wherein:

X is S;

Y is N;

R₆ is H or OH;

R is



wherein:

R₁ is an alkyl, alkenyl, alkynyl, alkoxy, allyloxy, aryl, heteroaryl, cycloalkyl or heterocycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-

R_c , $-O-SO-R_c$, $-O-S-R_c$, $-S-CO-R_c$, $-SO-CO-OR_c$, $-SO_2-CO-OR_c$, $-O-SO_3$, $-NR_c-SR_d$, $-NR_c-SO-R_d$, $NR_c-SO_2-R_d$, $-CO-SR_c$, $-CO-SO-R_c$, $CO-SO_2-R_c$, $-CS-R_c$, $-CSO-R_c$, $-CSO_2-R_c$, $-NR_c-CS-R_d$, $-O-CS-R_c$, $-O-CSO-R_c$, $O-CSO_2-R_c$, $-SO_2-NR_dR_e$, $-SO-NR_dR_e$, $-S-NR_dR_e$, $-NR_d-CSO_2-R_d$, $-NR_c-CSO-R_d$, NR_c-CS-R_d , $-SH$, $-S-R_b$, and $-PO_2-OR_c$, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-CO-R_c$, $-CO-OR_c$, $-O-CO-O-R_c$, $-O-CO-R_c$, $-NR_c-CO-R_d$, $-CO-NR_dR_e$, $-OH$, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-COR_f$, $-COOR_f$, $-O-CO-O-R_f$, $-O-CO-R_f$, $-OH$, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , $-CN$, $-(CH_2)_z-CN$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, $-OH$, $=O$, $-N-OH$, $N-OR_c$, $-NR_dR_e$, $-CO-NR_dR_e$, $-CO-OR_c$, $-CO-R_c$, $-NR_c-CO-NR_dR_e$, $-C-CO-OR_c$, $-NR_c-CO-R_d$, $-O-CO-O-R_c$, $O-CO-NR_dR_e$, $-SH$, $-O-R_b$, $-O-R_a-O-$, $-S-R_b$, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a , R_b , R_c , R_d , and R_e are defined above;

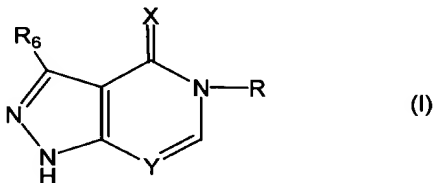
R_7 is hydrogen or a C_1-C_3 alkyl, hydroxy or C_1-C_3 alkoxy group; and

R_8 is hydrogen or an alkyl, alkenyl, alkoxy, allyloxy, aryl, heteroaryl, cycloalkyl or heterocycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, $-NO_2$, $-N-OH$, $N-OR_c$, $-CN$, $-(CH_2)_z-CN$ where z is an integer from 0 to 4, halogen, $-OH$, $-O-R_a-O-$, $-OR_b$, $-CO-R_c$, $O-CO-R_c$, $-CO-OR_c$, $-O-CO-OR_c$, $-O-CO-O-CO-R_c$, $-O-OR_c$, $=O$, $=S$, SO_2-R_c , $-SO-R_c$, $-NR_dR_e$, $-CO-NR_dR_e$, $-O-CO-NR_dR_e$, $-NR_c-$

CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where alkyl, heteroalkyl, alkenyl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above;

or a pharmaceutically acceptable salt thereof, ~~a pharmaceutically acceptable prodrug, or a pharmaceutically active metabolite of said compound, or a pharmaceutically acceptable salt of said metabolite.~~

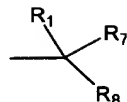
22. (currently amended) A compound represented by the formula I:



wherein:

X is O;

Y is N;
 R_6 is H;
 R is



wherein:

R_1 is an alkyl, alkenyl, alkynyl, alkoxy, allyloxy, aryl, heteroaryl, cycloalkyl or heterocycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, $-NO_2$, $-N-OH$, $N-OR_c$, $-CN$, $-(CH_2)_z-CN$ where z is an integer from 0 to 4, halogen, $-OH$, $-O-R_a-O-$, $-OR_b$, $-CO-R_c$, $O-CO-R_c$, $-CO-OR_c$, $-O-CO-OR_c$, $-O-CO-O-CO-R_c$, $-O-OR_c$, $=O$, $=S$, SO_2-R_c , $-SO-R_c$, $-NR_dR_e$, $-CO-NR_dR_e$, $-O-CO-NR_dR_e$, $-NR_c-CO-NR_dR_e$, $-NR_c-CO-R_e$, $NR_c-CO-OR_e$, $-CO-NR_c-CO-R_d$, $-O-SO_2-R_c$, $-O-SO-R_c$, $-O-S-R_c$, $-S-CO-R_c$, $-SO-CO-OR_c$, $-SO_2-CO-OR_c$, $-O-SO_3$, $-NR_c-SR_d$, $-NR_c-SO-R_d$, $NR_c-SO_2-R_d$, $-CO-SR_c$, $-CO-SO-R_c$, $CO-SO_2-R_c$, $-CS-R_c$, $-CSO-R_c$, $-CSO_2-R_c$, $-NR_c-CS-R_d$, $-O-CS-R_c$, $-O-CSO-R_c$, $O-CSO_2-R_c$, $-SO_2-NR_dR_e$, $-SO-NR_dR_e$, $-S-NR_dR_e$, $-NR_d-CSO_2-R_d$, $-NR_c-CSO-R_d$, NR_c-CS-R_d , $-SH$, $-S-R_b$, and $-PO_2-OR_c$, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-CO-R_c$, $-CO-OR_c$, $-O-CO-O-R_c$, $-O-CO-R_c$, $-NR_c-CO-R_d$, $-CO-NR_dR_e$, $-OH$, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-COR_f$, $-COOR_f$, $-O-CO-O-R_f$, $-O-CO-R_f$, $-OH$, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , $-CN$, $-(CH_2)_z-CN$ where z is an integer from 0 to 4,

halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above;

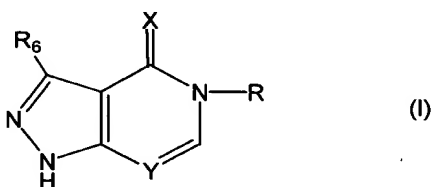
R₇ is hydrogen or a C₁-C₃ alkyl, hydroxy or C₁-C₃ alkoxy group; and

R₈ is an alkenyl, alkoxy, allyloxy, aryl, heteroaryl, cycloalkyl or heterocycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where alkyl, heteroalkyl, alkenyl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4,

halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above;

or a pharmaceutically acceptable salt thereof, ~~a pharmaceutically acceptable prodrug, or a pharmaceutically active metabolite of said compound, or a pharmaceutically acceptable salt of said metabolite.~~

23. (currently amended) A compound represented by the formula I:



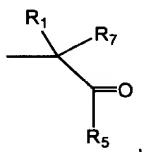
wherein:

X is O or S;

Y is N or CH;

R₆ is H or OH; and

R is



wherein:

R₁ is hydrogen or an alkyl, alkenyl, alkynyl, alkoxy, allyloxy, aryl, heteroaryl, cycloalkyl or heterocycloalkyl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -

O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d, NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-R_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above;

R₅ is hydrogen or an alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-NR_dR_e, -S-NR_dR_e, -NR_d-CSO₂-R_d, -NR_c-CSO-R_d,

NR_c-CS-R_d, -SH, -S-R_b, and -PO₂-OR_c, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -CO-R_c, -CO-OR_c, -O-CO-O-R_c, -O-CO-OR_c, -NR_c-CO-R_d, -CO-NR_dR_e, -OH, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c, R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, -COR_f, -COOR_f, -O-CO-O-R_f, -O-CO-R_f, -OH, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO₂, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, -OH, =O, -N-OH, N-OR_c, -NR_dR_e, -CO-NR_dR_e, -CO-OR_c, -CO-R_c, -NR_c-CO-NR_dR_e, -C-CO-OR_c, -NR_c-CO-R_d, -O-CO-O-R_c, O-CO-NR_dR_e, -SH, -O-R_b, -O-R_a-O-, -S-R_b, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a, R_b, R_c, R_d, and R_e are defined above; and

R₇ is hydrogen or a C₁-C₃ alkyl, hydroxy or C₁-C₃ alkoxy group;

or a pharmaceutically acceptable salt thereof, ~~a pharmaceutically acceptable prodrug, or a pharmaceutically active metabolite of said compound, or a pharmaceutically acceptable salt of said metabolite.~~

24. (original) A compound or pharmaceutically acceptable salt according to claim 23, wherein R₅ is a cycloalkyl, heterocycloalkyl, aryl or heteroaryl group unsubstituted or substituted with one or more substituents independently selected from the group consisting of alkyl, heteroalkyl, haloalkyl, haloaryl, halocycloalkyl, haloheterocycloalkyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, -NO₂, -N-OH, N-OR_c, -CN, -(CH₂)_z-CN where z is an integer from 0 to 4, halogen, -OH, -O-R_a-O-, -OR_b, -CO-R_c, O-CO-R_c, -CO-OR_c, -O-CO-OR_c, -O-CO-O-CO-R_c, -O-OR_c, =O, =S, SO₂-R_c, -SO-R_c, -NR_dR_e, -CO-NR_dR_e, -O-CO-NR_dR_e, -NR_c-CO-NR_dR_e, -NR_c-CO-R_e, NR_c-CO-OR_e, -CO-NR_c-CO-R_d, -O-SO₂-R_c, -O-SO-R_c, -O-S-R_c, -S-CO-R_c, -SO-CO-OR_c, -SO₂-CO-OR_c, -O-SO₃, -NR_c-SR_d, -NR_c-SO-R_d, NR_c-SO₂-R_d, -CO-SR_c, -CO-SO-R_c, CO-SO₂-R_c, -CS-R_c, -CSO-R_c, -CSO₂-R_c, -NR_c-CS-R_d, -O-CS-R_c, -O-CSO-R_c, O-CSO₂-R_c, -SO₂-NR_dR_e, -SO-

NR_dR_e , $-\text{S}-\text{NR}_d\text{R}_e$, $-\text{NR}_d-\text{CSO}_2-\text{R}_d$, $-\text{NR}_c-\text{CSO}-\text{R}_d$, $\text{NR}_c-\text{CS}-\text{R}_d$, $-\text{SH}$, $-\text{S}-\text{R}_b$, and $-\text{PO}_2-\text{OR}_c$, where R_a is selected from the group consisting of alkyl, heteroalkyl, alkenyl, aryl, heteroaryl, and alkynyl, R_b is selected from the group consisting of alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{CO}-\text{R}_c$, $-\text{CO}-\text{OR}_c$, $-\text{O}-\text{CO}-\text{O}-\text{R}_c$, $-\text{O}-\text{CO}-\text{R}_c$, $-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{OH}$, Ar, heteroaryl, heterocycloalkyl, and cycloalkyl, and R_c , R_d and R_e are each independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, haloalkyl, alkenyl, alkynyl, $-\text{COR}_f$, $-\text{COOR}_f$, $-\text{O}-\text{CO}-\text{O}-\text{R}_f$, $-\text{O}-\text{CO}-\text{R}_f$, $-\text{OH}$, Ar, heteroaryl, cycloalkyl, and heterocycloalkyl, where R_d and R_e can cyclize to form a heteroaryl or heterocycloalkyl group, and R_f is selected from the group consisting of hydrogen, alkyl, and heteroalkyl, and where any of the alkyl, heteroalkyl, alkylene, aryl, cycloalkyl, heterocycloalkyl, or heteroaryl moieties present in the above substituents may be further substituted with one or more substituents independently selected from the group consisting of NO_2 , $-\text{CN}$, $-(\text{CH}_2)_z-\text{CN}$ where z is an integer from 0 to 4, halogen, haloalkyl, haloaryl, $-\text{OH}$, $=\text{O}$, $-\text{N}-\text{OH}$, $\text{N}-\text{OR}_c$, $-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{CO}-\text{OR}_c$, $-\text{CO}-\text{R}_c$, $-\text{NR}_c-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{C}-\text{CO}-\text{OR}_c$, $-\text{NR}_c-\text{CO}-\text{R}_d$, $-\text{O}-\text{CO}-\text{O}-\text{R}_c$, $\text{O}-\text{CO}-\text{NR}_d\text{R}_e$, $-\text{SH}$, $-\text{O}-\text{R}_b$, $-\text{O}-\text{R}_a-\text{O}-$, $-\text{S}-\text{R}_b$, and unsubstituted alkyl, unsubstituted aryl, unsubstituted cycloalkyl, unsubstituted heterocycloalkyl, and unsubstituted heteroaryl, where R_a , R_b , R_c , R_d , and R_e are defined above.

25. (original) A compound or pharmaceutically acceptable salt according to claim 1, wherein Y is N; X is O; and R_6 is H.

26. (original) A compound or pharmaceutically acceptable salt according to claim 1, wherein Y is N; X is S; and R_6 is H.

27. (original) A compound or pharmaceutically acceptable salt according to claim 1, wherein Y is CH; X is O; and R_6 is H.

28. (original) A compound or pharmaceutically acceptable salt according to claim 1, wherein Y is CH; X is S; and R_6 is H.

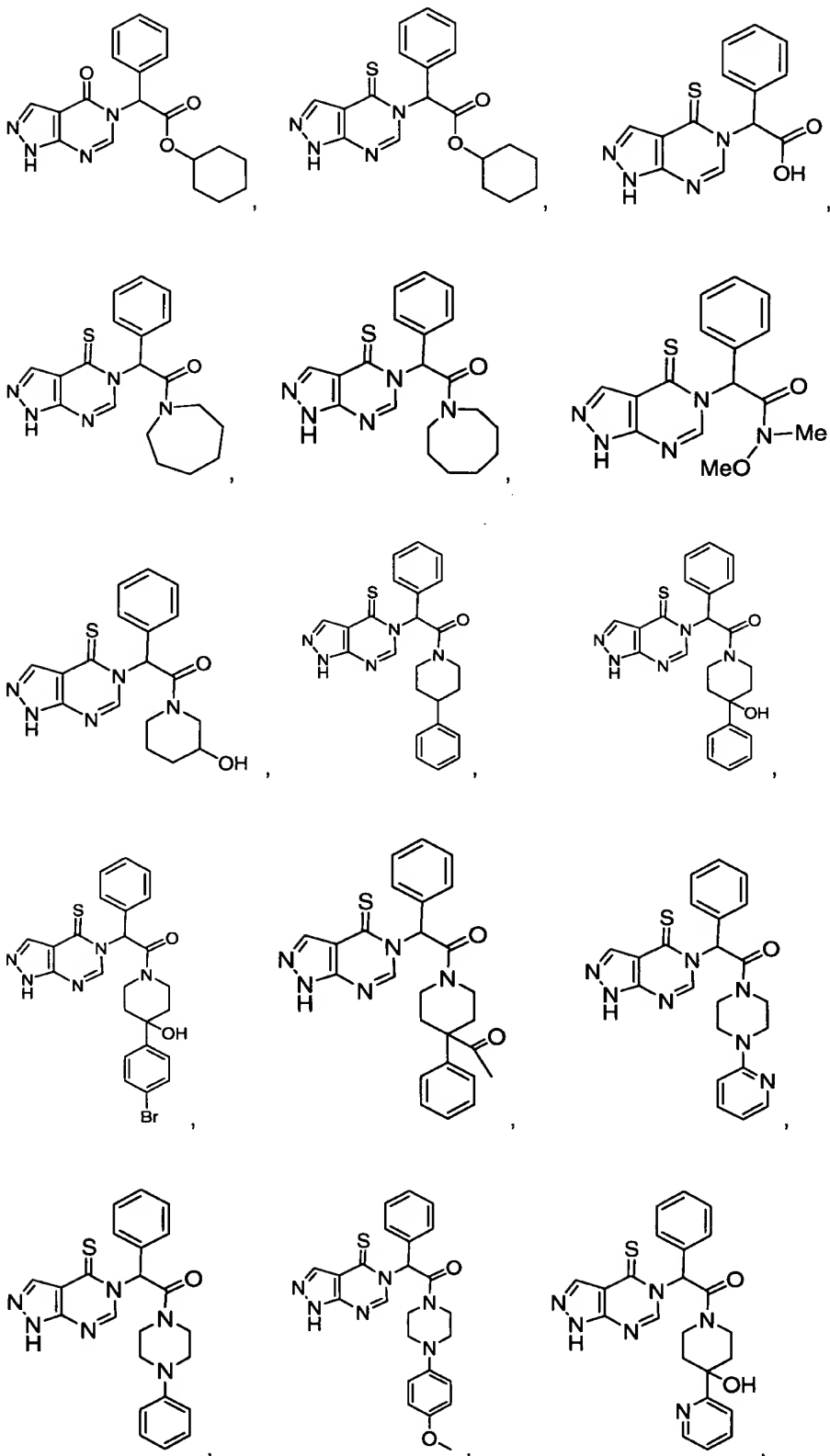
29. (original) A compound or pharmaceutically acceptable salt according to claim 1, wherein Y is N; X is O; and R_6 is OH.

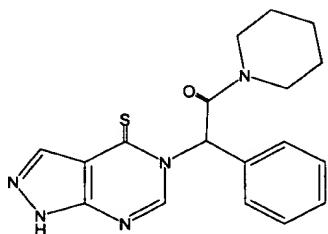
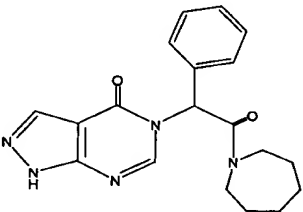
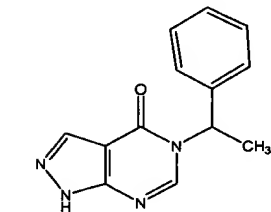
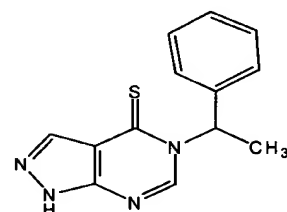
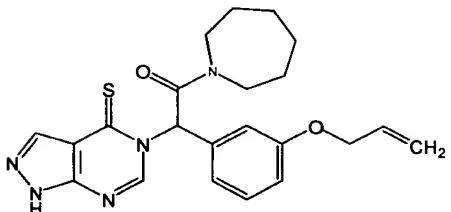
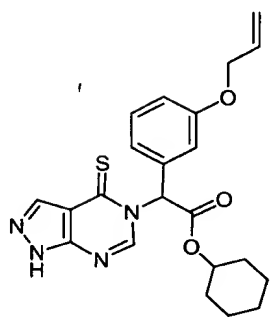
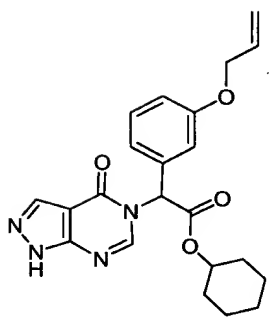
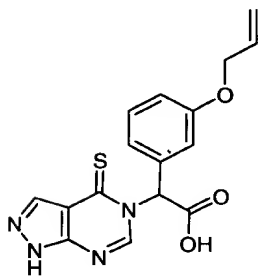
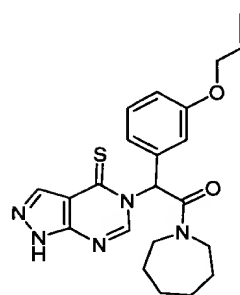
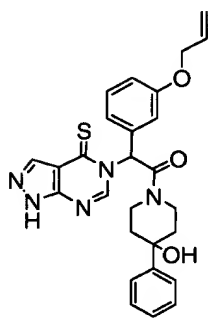
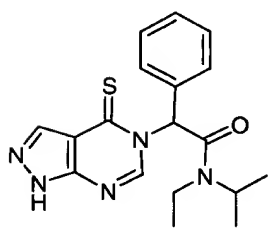
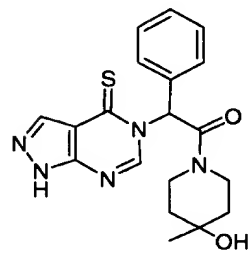
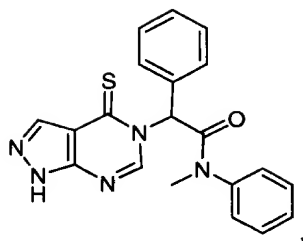
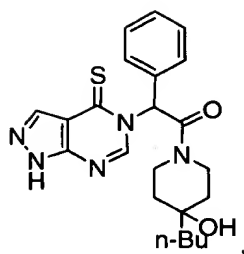
30. (original) A compound or pharmaceutically acceptable salt according to claim 1, wherein Y is N; X is S; and R_6 is OH.

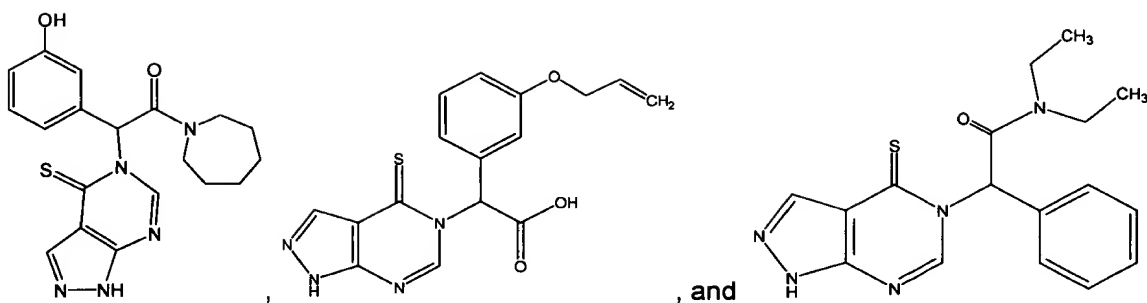
31. (original) A compound or pharmaceutically acceptable salt according to claim 1, wherein Y is CH; X is O; and R_6 is OH.

32. (original) A compound or pharmaceutically acceptable salt according to claim 1, wherein Y is CH; X is S; and R_6 is OH.

33. (original) A compound selected from the group consisting of

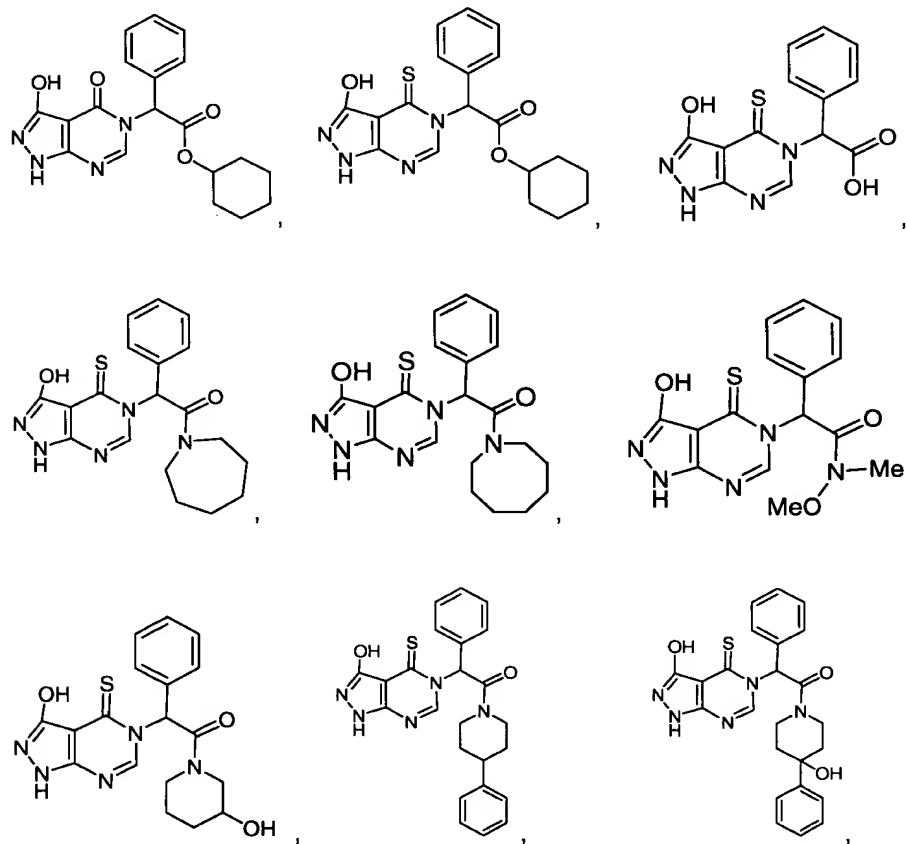


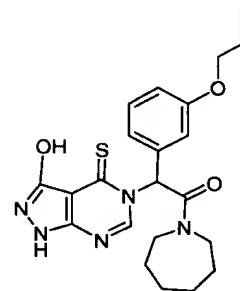
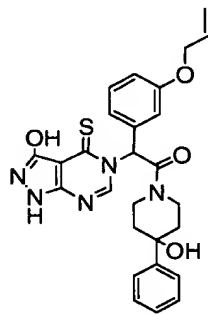
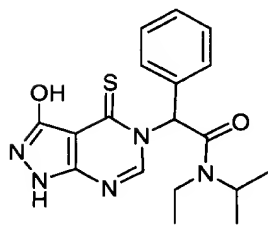
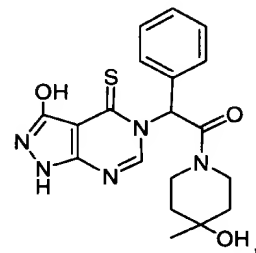
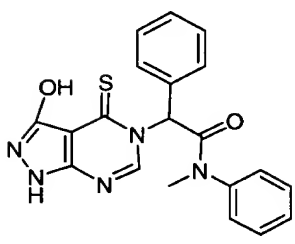
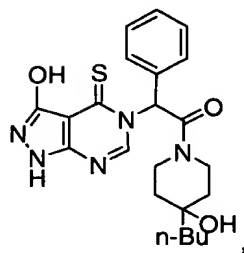
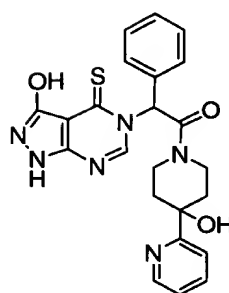
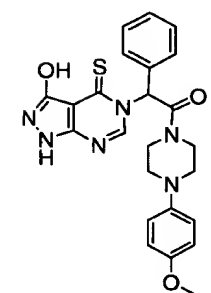
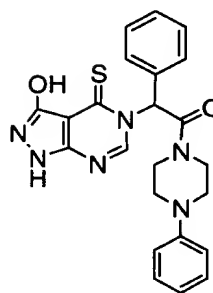
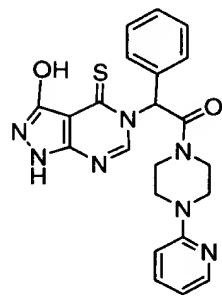
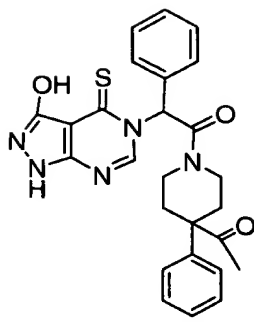
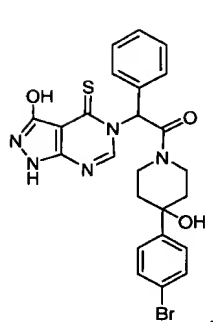


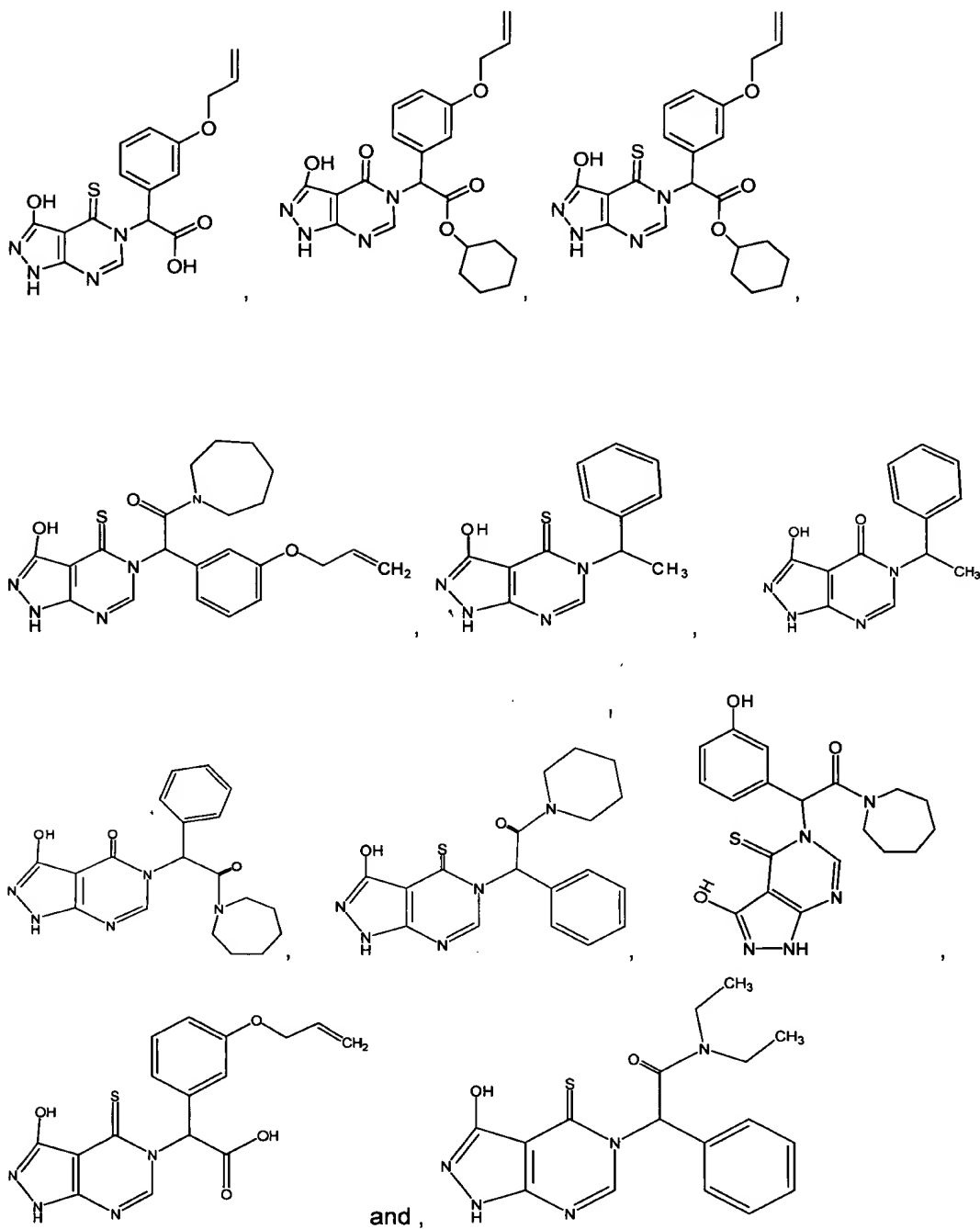


and pharmaceutically acceptable salts thereof.

34. (original) A compound selected from the group consisting of

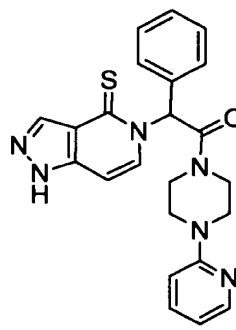
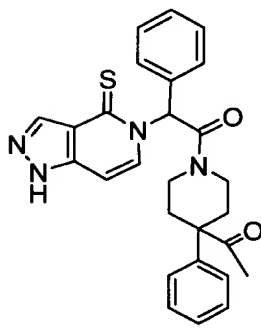
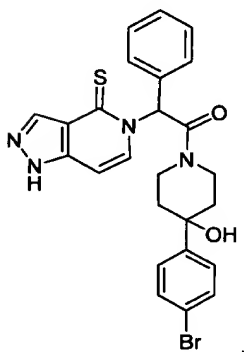
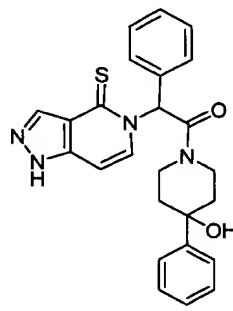
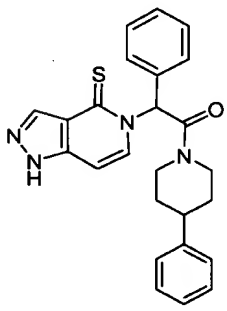
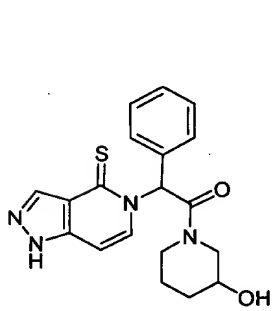
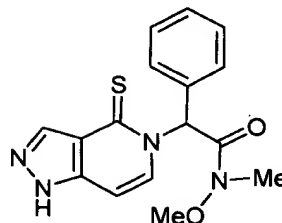
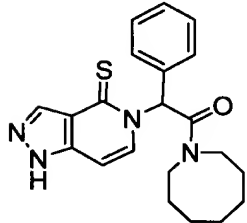
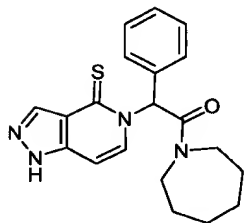
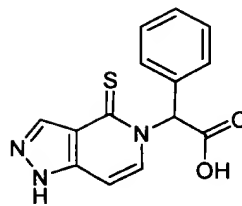
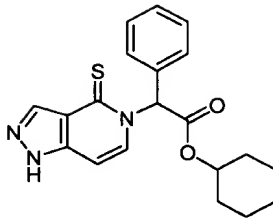
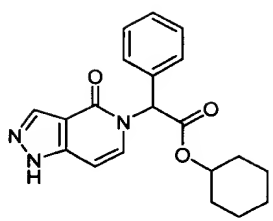


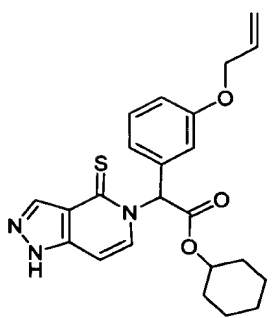
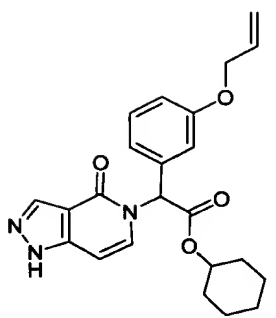
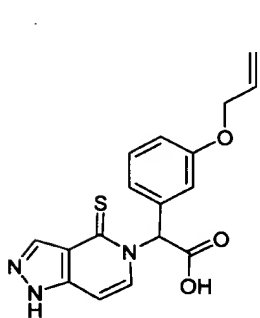
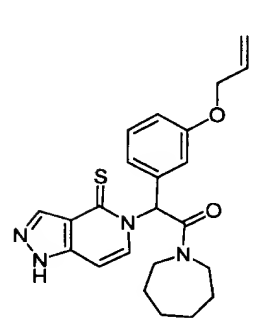
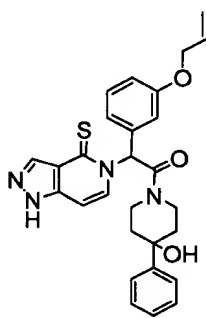
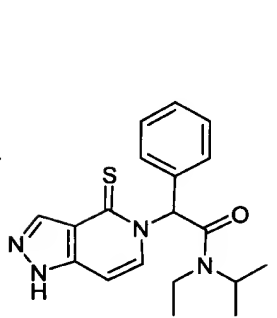
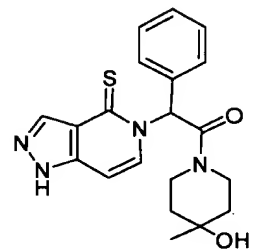
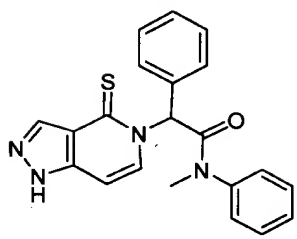
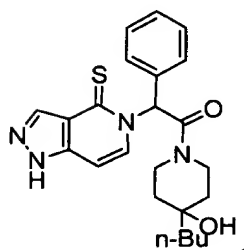
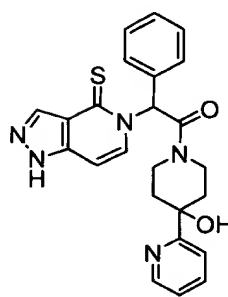
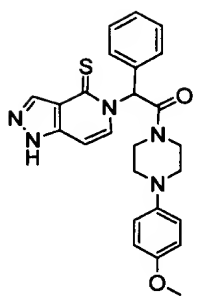
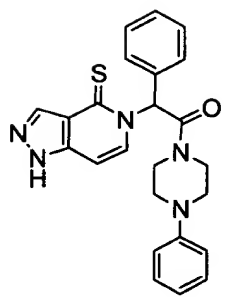


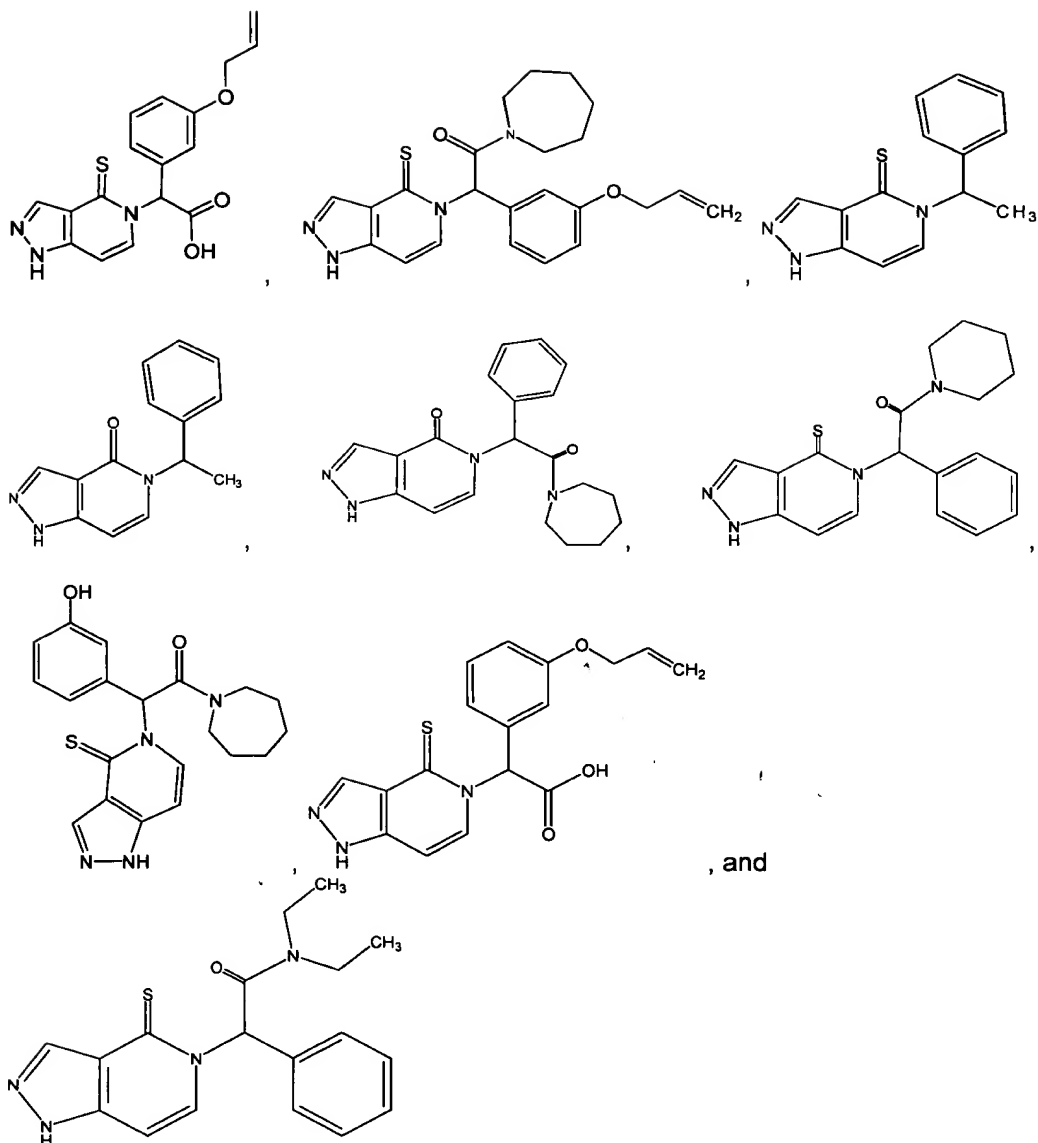


and pharmaceutically acceptable salts thereof.

35. (original) A compound selected from the group consisting of

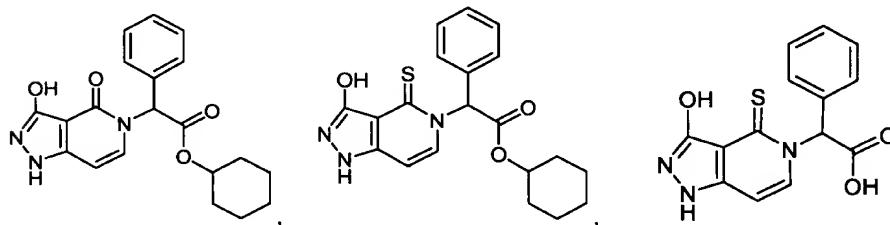


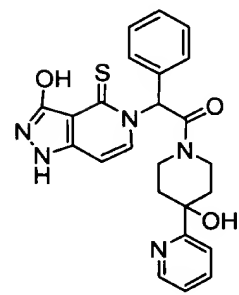
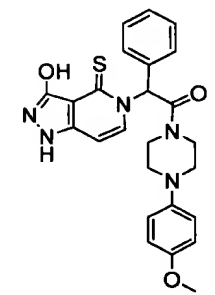
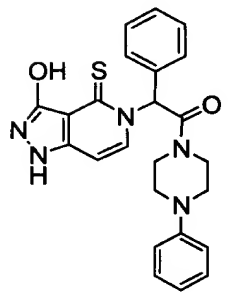
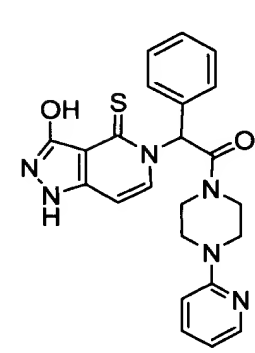
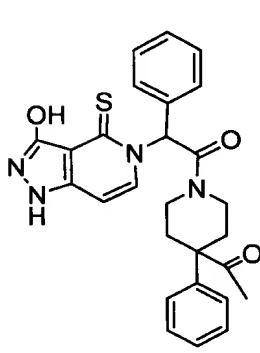
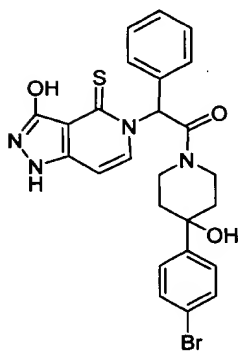
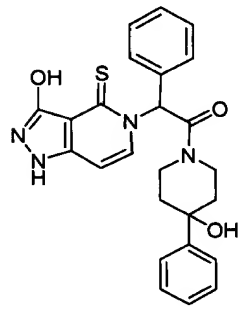
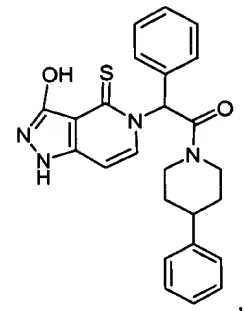
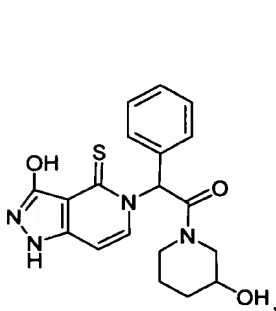
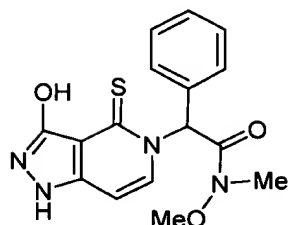
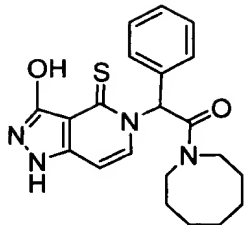
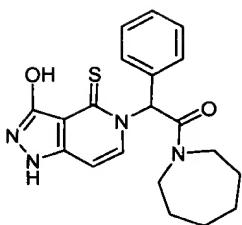


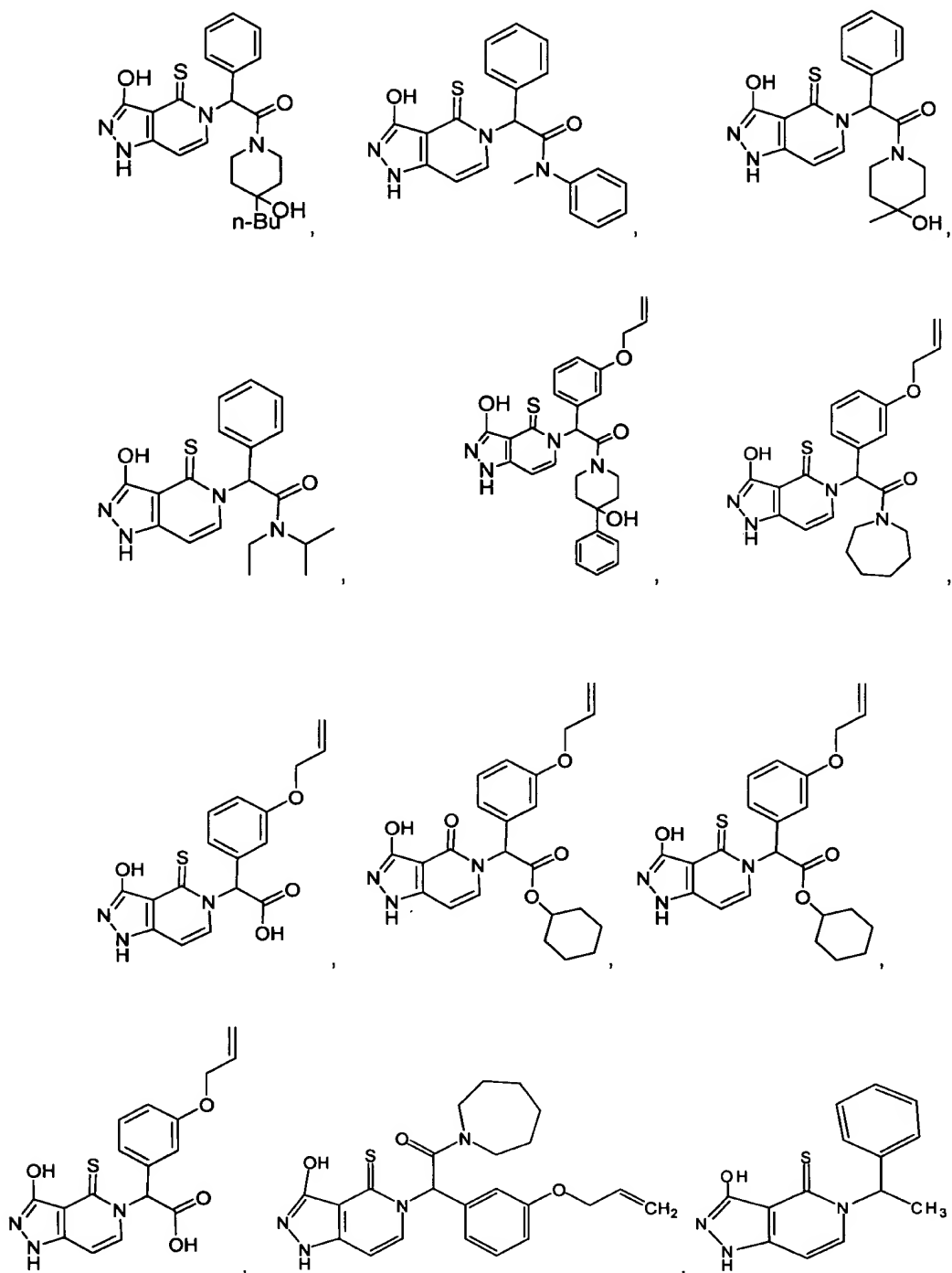


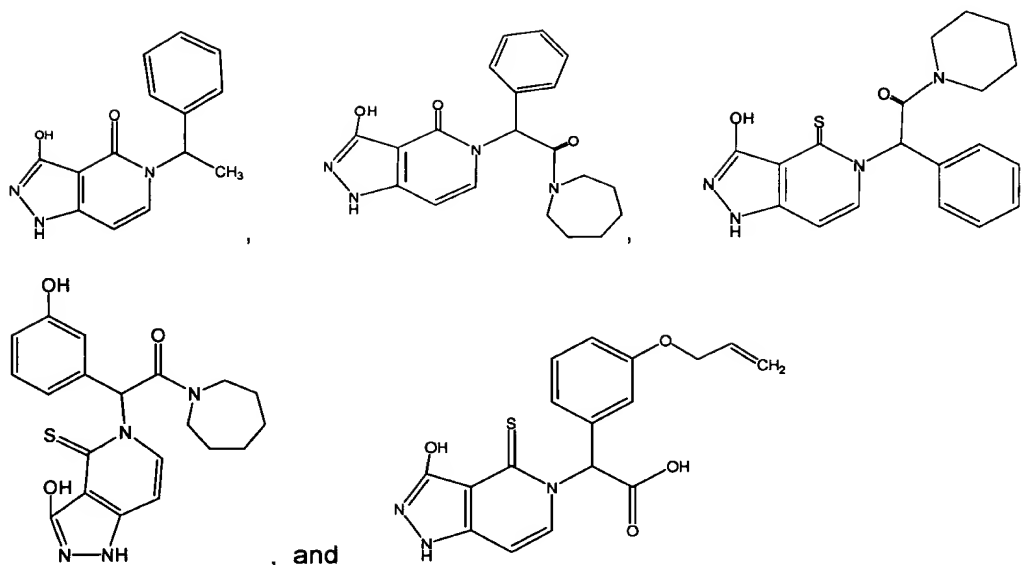
and pharmaceutically acceptable salts thereof.

36. (original) A compound selected from the group consisting of









and pharmaceutically acceptable salts thereof.

37. (currently amended) A composition comprising:
a therapeutically effective amount of a compound or pharmaceutically acceptable salt, ~~pharmaceutically acceptable prodrug or a pharmaceutically active metabolite of said compound~~ according to claim 1; and
a pharmaceutically acceptable carrier, diluent, or vehicle therefore.

38. (original) A composition comprising:
a therapeutically effective amount of a compound or pharmaceutically acceptable salt according to claim 33; and
a pharmaceutically acceptable carrier, diluent, or vehicle therefore.

39. (original) A composition comprising:
a therapeutically effective amount of a compound or pharmaceutically acceptable salt according to claim 34; and
a pharmaceutically acceptable carrier, diluent, or vehicle therefore.

40. (original) A composition comprising:
a therapeutically effective amount of a compound or pharmaceutically acceptable salt according to claim 35; and
a pharmaceutically acceptable carrier, diluent, or vehicle therefore.

41. (original) A composition comprising:
a therapeutically effective amount of a compound or pharmaceutically acceptable salt according to claim 36; and
a pharmaceutically acceptable carrier, diluent, or vehicle therefore.

42-45. (canceled)

46. (currently amended) A method of inhibiting or modulating an enzyme activity of

ERAB or HADH2, comprising contacting said enzyme with an effective amount of a compound, or pharmaceutically acceptable salt, ~~pharmaceutically acceptable prodrug, or pharmaceutically active metabolite~~ defined in claim 1.

47. (original) A method of inhibiting or modulating an enzyme activity of ERAB or HADH2, comprising contacting said enzyme with an effective amount of a compound or pharmaceutically acceptable salt defined in claim 33.

48. (original) A method of inhibiting or modulating an enzyme activity of ERAB or HADH2, comprising contacting said enzyme with an effective amount of a compound or pharmaceutically acceptable salt defined in claim 34.

49. (original) A method of inhibiting or modulating an enzyme activity of ERAB or HADH2, comprising contacting said enzyme with an effective amount of a compound or pharmaceutically acceptable salt defined in claim 35.

50. (original) A method of inhibiting or modulating an enzyme activity of ERAB or HADH2, comprising contacting said enzyme with an effective amount of a compound or pharmaceutically acceptable salt defined in claim 36.

51. (original) A compound or pharmaceutically acceptable salt as defined in claim 1, wherein the compound or pharmaceutically acceptable salt has an IC_{50} against ERAB activity of less than or equal to 600 μM .

52. (original) A compound or pharmaceutically acceptable salt as defined in claim 51, wherein the compound or pharmaceutically acceptable salt has an IC_{50} against ERAB activity of less than or equal to 50 μM .

53. (original) A compound or pharmaceutically acceptable salt as defined in claim 51, wherein the compound or pharmaceutically acceptable salt has an IC_{50} against ERAB activity of less than or equal to 3.0 μM .

54. (canceled)